

UNIVERSITY OF CALIFORNIA

SANTA CRUZ

**THE KARNATIK TABLA: CROSS-CULTURAL  
MUSIC SYNTHESIS IN SOUTH INDIAN  
PERCUSSION PERFORMANCE**

A thesis submitted in partial satisfaction  
of the requirements for the degree of

MASTER OF ARTS

in

ETHNOMUSICOLOGY

by

**Michael Lindsey**

June 2013

The Thesis of Michael Lindsey  
is approved:

---

Professor Dard Neuman, Chair

---

Professor Amy Beal

---

Professor Tanya Merchant

---

Tyrus Miller  
Vice Provost and Dean of Graduate Studies

Copyright © by  
Michael Paul Lindsey  
2013

## Table of Contents

<b>List of Figures</b> .....	v
<b>Abstract</b> .....	vii
<b>Acknowledgements</b> .....	viii
<b>Chapter 1:</b>	
<b>Introduction</b> .....	1
<b>Chapter 2: From the Temple to the Court: The History of Percussion</b>	
<b>Ensembles in South Indian Musical Culture</b> .....	7
The Place of Music and Musical Ensembles in South India.....	9
Social Developments and Implications during the Nayaka Kingships.....	12
Musical Canonization and Standardization during the Maratha Kingships....	17
Social Mobility Among Performers of Non-Brahmin Communities.....	19
Further Opportunities for Social Mobility during Karnatik Music’s Shift from Tanjore to Madras.....	21
Conclusion.....	23
<b>Chapter 3: Musical Taste, Nationalism, and Drumming: The Karnatik</b>	
<b>Percussion Ensemble in the Public Sphere</b> .....	25
Finding a New Musical Space: Karnatik Music’s Shift to the Public Sphere....	27
Sonic Implications of Sangeetha Melam on Karnatik Performance Practice within <i>Sabha</i> culture.....	30
Musical Custodianship in Early Modern Karnatik Music.....	33
Articulating the Classical: The Influence of Orientalist Scholarship on Karnatik Musical Discourses.....	36
Musical Critique and Reform during the Early 20 <sup>th</sup> Century.....	39
Percussion Ensemble in Modern Karnatik Music: The Tala Vadya Katcheri.....	44
<b>Chapter 4: A Social Network: Implications Regarding Tabla Gharanas</b> .....	50
Levels of Sociomusical Organization for Tabliya.....	50
Tabla Gharanas in the Late 20 <sup>th</sup> and Early 21 <sup>st</sup> Centuries.....	53
Additional Tabla Gharanas.....	55
Conclusion.....	58
<b>Chapter 5: The Mehboob Khansaheb Gharana of Tabla</b> .....	59
Principles of Hindustani Taal.....	60
Musical Aesthetics of Hindustani Tabla Repertoire.....	62
The Mehboob Khansaheb Gharana of Tabla.....	67
Analysis of Pedagogic and Solo Repertoire.....	69
Analysis of Live Performance.....	78

<b>Chapter 6: The Karnatik Tabla</b> .....	83
Concepts of Karnatik Composition.....	83
The Use of Yatis in Percussion Repertoire.....	87
The Karnatik Tabla.....	91
Analysis of Pedagogic and Solo Repertoire.....	93
Analysis of Live Performance.....	104
<b>Chapter 7: Conclusion</b> .....	109
<b>Appendix A - Musical Transcriptions</b> .....	111
<b>Glossary of Terms</b> .....	173
<b>List of Supplemental Files</b> .....	176
<b>Bibliography</b> .....	177

## List of Figures

2.1	Map of India (1760).....	8
2.2	Periya Melam.....	11
2.3	“A Musical Party” .....	23
5.1	Teentaal and Jhaptaal Avartas and Thekas.....	62
5.2	Kaida in Teentaal.....	64
5.3	Kaida in Teentaal.....	66
5.4	Kaida in Teentaal.....	69
5.5	Kaida in Jhaptaal.....	71
5.6	Tipalli Gat in Teentaal.....	74
5.7	Dupalli Gat in Teentaal.....	75
5.8	Tipalli Chakradar in Teentaal.....	77
5.9	Tipalli Chakradar in Jhaptaal.....	80
6.1a-f	The Six Yatis.....	85
6.2	Adi Tala.....	87
6.3	Korvai in Adi Tala.....	88
6.4	Gopuccha Yati in Figure 6.3 Korvai.....	90
6.5	Korvai in Adi Tala.....	91
6.6	South Indian Percussion Ensemble “Vibrations” .....	92
6.7	Kaida in Teentaal.....	94
6.8	Srotogata Yati in Kaida in Teentaal.....	94
6.9	Gat in Teentaal.....	96
6.10	Gat in Teentaal.....	97
6.11	Gat in Teentaal.....	98
6.12	Gat in Teentaal.....	99
6.13	Chakradar in Teentaal.....	100

6.14	Damaru yati thematic development in Chakradar in Teentaal.....	103
6.15	Chakradar in Teentaal.....	104
6.16	Chakradar in Adi Tala.....	106
6.17	Chakradar in Adi Tala variation.....	107

## **Abstract**

### **The Karnatik Tabla: Cross-Cultural Music Synthesis in South Indian Percussion Performance**

By

Michael Paul Lindsey

The *Karnatik tabla* is a new tradition of performance practice concerning the *tabla* (drum) of North India. This tradition is propagated amid the diaspora of tabla culture in Chennai, a major city in the southern Indian state of Tamil Nadu, and is distinguished by a synthesis of musical elements from both North (Hindustani) and South (Karnatik) Indian music.

The context of Chennai, a city abounding with Karnatik musical culture, and the innovative musical spaces in which Karnatik artists have come to perform have facilitated the development of this tradition. The incorporation of the tabla into the *Tala Vadya Katcheri*, a percussion ensemble genre of Karnatik music that developed from the music practices of Hindu temples and religious ritual, has enabled the cross-cultural music synthesis that defines the aesthetic of the Karnatik tabla.

This thesis explores the social and sonic realms of the Karnatik tabla through a discussion of the history concerning percussion ensembles in Karnatik music and a comparative analysis to another tradition of the tabla propagated within the city of Chennai, by using musical repertoire collected from private instrumental study and transcriptions of live recorded performances.

## Acknowledgements

The musical material contained within this thesis represents my personal investigations of the North Indian tabla spanning the past seven years. A majority of my research I completed during my employment with a musical conservatory in the South Indian city of Chennai from 2008-2011. Throughout the course of my employment I connected with many friends, musicians, teachers, and students who contributed greatly to my musical investigations and queries; without them this project would not have been possible.

In India I would like to thank first and foremost my guru-ji's, Nagarajan Sundar and Rajesh Dhawale, for their willingness and patience in sharing their musical knowledge with me. I dedicate this work to both of these amazing musicians with the greatest respect. I wish to thank my Tamil teacher, Jayanthi Kannan, and her husband for their patience and joyful sense of humor during my language classes. Additionally, I offer my sincerest thanks to V. B. "Tabla" Madhu, Papanasam Sethuraman, Constantine Nakassis, Paul Jacob, Tushar Raturi, Patrick Richey, Robbert van Hulzen, A. R. Rahman and the entire staff at AM Studios, and the administration, faculty, and students of KM Music Conservatory in Chennai.

In the United States my sincere thanks goes to my advisor, Dard Neuman, for his shared time and expertise in helping edit the content of this thesis. I also wish to express my sincerest gratitude to Cleveland Johnson, who first introduced me to Indian classical music when I was an undergraduate student

and has remained a highly influential mentor and friend. I would also like to thank my music teachers who have shared their wisdom and guidance during my musical education, including Craig Paré, Amy Lynn Barber, Daniel Fyffe, and Raymond Hauser. Finally, I would like to thank my parents, family, and friends for their never-ending support of all my musical endeavors and investigations; even if it means living on the opposite side of the globe for extended periods of time.

# Chapter 1

## Introduction

This thesis analyzes two traditions of the *tabla*, the drums particular to Hindustani music, propagated within the South Indian city of Chennai (formerly known as Madras). The instrument, whose name is derived from Arabic meaning simply “drum,” originated within the geographic sphere of North India and has been the primary accompaniment instrument for Hindustani vocalists and instrumentalists since the 18<sup>th</sup> century. Until the early decades of the 20<sup>th</sup> century, the musicians whom played the tabla, known as *tabliya*, and other percussionists were limited solely to the role of accompanist. Beginning in the early 20<sup>th</sup> century however, artists such as the preeminent tabliya Ahmed Jan Thirakwa (1891-1976) and the legendary Ustad Allah Rakha (1919-2000) helped posit the tabla as a solo-performing instrument. As the tabla entered the solo spotlight, a plethora of new musical spaces were created for the instrument’s practitioners. Tabla artists capitalized on this increase in performance space and through their creativity and ingenuity developed the solo tabla into a rich and diverse performing tradition. This thesis presents an investigation into a new musical space for the solo tabla that has facilitated the development of a unique musical tradition that I have named the “Karnatik Tabla.”

My research is primarily derived from the time I spent living in Chennai, India. During the course my three year stay I learned the tabla from two

teachers: Nagarajan Sundar, a multi-percussionist in Chennai who was trained in both Hindustani and Karnatik percussion traditions; and Rajesh Dhawale, a tabla artist of the Mehboob Khansaheb *gharana*, a pedagogic lineage within the Farukhabad gharana (school) of tabla performance. From these musicians I learned two distinct traditions that were divergent in their approaches to performance practice. The tradition with which Dhawale instructs is a musical tradition that reflects an adherence to his respective musical heritage – the Farukhabad gharana. In contrast, Sundar propagates a tradition of tabla performance that he has developed that synthesizes compositional principles of both genres of Indian music – Hindustani (North Indian) and Karnatik (South Indian). This musical synthesis has been facilitated by the musical space the Karnatik percussion ensemble, also known as the *Tala Vadya Katcheri*, a dynamic performing body that developed into a solo-performance genre from the musicological discourses in South India during the early decades of the 20<sup>th</sup> century. Throughout this thesis I will constantly refer to performing ensembles within Karnatik musical culture, about which deserves further clarification.

The term *ensemble*, coming from French meaning “together” or “the whole,” refers to a small collective of performing musicians. In addition, when defining the musical space of an ensemble, the term also implies a quality of performance that involves an exhibition of co-operation among performing members.<sup>1</sup> In the context of Indian classical music – including both Hindustani and Karnatik traditions – the presence of ensembles has remained specific to

---

<sup>1</sup> “Ensemble,” *The Oxford Dictionary of Music Online*, accessed May 15, 2011.

Karnatik performance practice. Both genres of Indian classical music maintain themselves predominantly as solo performance traditions subject to a rigid socio-musical hierarchy of performance roles and spaces. Leading a musical performance in both traditions is the soloist, either a vocalist or instrumentalist, whom is accompanied by various melodic and rhythmic accompaniments. The soloist is the deciding authority on all musical matters, while the accompanists maintain a subordinate role to that of the soloist. Throughout the course of the performance, it is the nature of both traditions of Indian music for the accompanists to interact musically with the soloists but never to dominate or deter attention away from the soloist. With regard to the musical role of an accompanist, Daniel Neuman writes,

It appears that the musical role of the accompanist, at least as it was traditionally conceived, implied no necessary creative component or particular grading of talent and consequently was largely interchangeable between people. It was a role in which the 'personality' of the accompanist could be treated as a constant and was not required to be expressed.<sup>2</sup>

Although one may consider the musical company present during a performance of Indian music to be an ensemble with regard to the presence of multiple musical personnel, the term is a poor choice of nomenclature. The musical hierarchy that is embedded within the performance practices of Indian music limits and places boundaries on the musical interconnectivity between soloists and accompanists. Such a hierarchy detracts the perception of unity and

---

<sup>2</sup> Daniel Neuman, *The Life of Music in North India*, Chicago: University of Chicago Press, 1990, p. 144.

connectedness that represents a key distinction to the definition of the word ensemble. In contrast, the performing ensembles about which are discussed throughout this thesis, as I will show, do not operate in accordance with such marked stratification. Rather, the musical space that they occupy is an integrated and dynamic musical environment in which the artists can not only interact with one another, but also engage in a musical conversation that can propel musicians to new levels of technical proficiency and virtuosity.

The content of this thesis is divided into two parts: the first part traces the history of the Karnatik percussion ensemble to its emergence as a solo performing body while the second part is devoted to an analysis of the tabla traditions of my two respective mentors. Chapter 2 discusses the history of performing ensembles within the socio-musical milieu of South India. Musical ensembles, known as *melas*, were an important entity of the ritual practices of South Indian Hindu temples and monastic courts. Musicians in these ensembles were typically of lower caste distinction and were thus limited with regards to the access of musical spaces and information. However, despite these social barriers *melam* musicians and their practices became integrated within the musical spaces associated with higher art music forms and came to be a chief factor influencing musical taste by the turn of the 20<sup>th</sup> century.

Chapter 3 discusses the musical renaissance Karnatik musical culture underwent during the early decades of the 20<sup>th</sup> century. Fueled by the tenets of the Orientalist accounts written by British colonials, the musical elite of South India urged a reformation of Karnatik music performance practice with the

intent of articulating a classical musical tradition. In specific, the musical elite argued that the presence of musical practices associated with melam music detracted from this classical aesthetic and was criticized greatly. This chapter traces the reform efforts of the musical literati in Madras, which resulted in the ultimate expulsion of melam practices from Karnatik art music forms and the creation of the solo percussion ensemble – the *tala vadya katcheri*.

Starting with chapter four my thesis changes focus from the socio-musical milieu of Karnatik music to that of the Hindustani tabla. Chapter 4 presents an overview of the nomenclature regarding the social and musical distinctions of *tabliya* and the relevance of these distinctions amongst contemporary tabla artists. In chapter 5 I begin my musical analysis focusing on the tabla tradition of one of my primary tabla teachers, Rajesh Dhawale. Dhawale is a proponent of the Mehboob Khansaheb gharana, a pedagogical lineage of musicians within the greater scope of the Farukhabad gharana of tabla performance practice. Through an analysis of collected repertoire and a recorded performance, I illustrate the various compositional approaches that define this musical tradition and those that correlate to the musical characteristics of the Farukhabad tradition. In chapter 6 I analyze the tabla tradition of my other tabla mentor, Nagarajan Sundar. The tradition of tabla that Sundar propagates features a synthesis of Hindustani and Karnatik compositional devices, which is facilitated by his participation in the musical space of the Karnatik percussion ensemble. I illustrate these various compositional approaches through an analysis of

repertoire obtained through instruction and a recorded performance of a *tala vadya katcheri* in which Sundar is a participating performer.

## Chapter 2

### **From the Temple to the Court: The History of Percussion Ensembles in South Indian Musical Culture**

The featuring of *melas*, performing musical ensembles, has remained an important particularity of Karnatik music practice for centuries. The Karnatik percussion ensembles that have facilitated the creation of the instrument tradition forming the premise of this thesis maintain links to their origins in the performing ensembles that were used in the ritual music practices of the Hindu temple and royal courts of pre-modern India. Present in this musical culture was a distinction of caste and gender that formed a distinct hierarchy among musicians, which defined limits to the performance and instruction of music. Within this hierarchy, the members of the ensemble communities were from the lowest tier of social distinction and being so, were restricted access to musical genres and spaces dominated by those of higher social distinction. Yet, despite these lines of social demarcation, the performances of Karnatik percussion ensembles that exist today occupy the same musical space of those within the classical idiom.

In this chapter I examine the musical place of ensembles within Karnatik music. Through an investigation into the sociology and politics of Karnatik musical culture commencing in the 16<sup>th</sup> century – the time from which contemporary Karnatik musical practices maintain their origins – I will show how the members of these ensembles overcame barriers of social and musical

hierarchies to merge their musical traditions and identities into the musical space of higher art music.

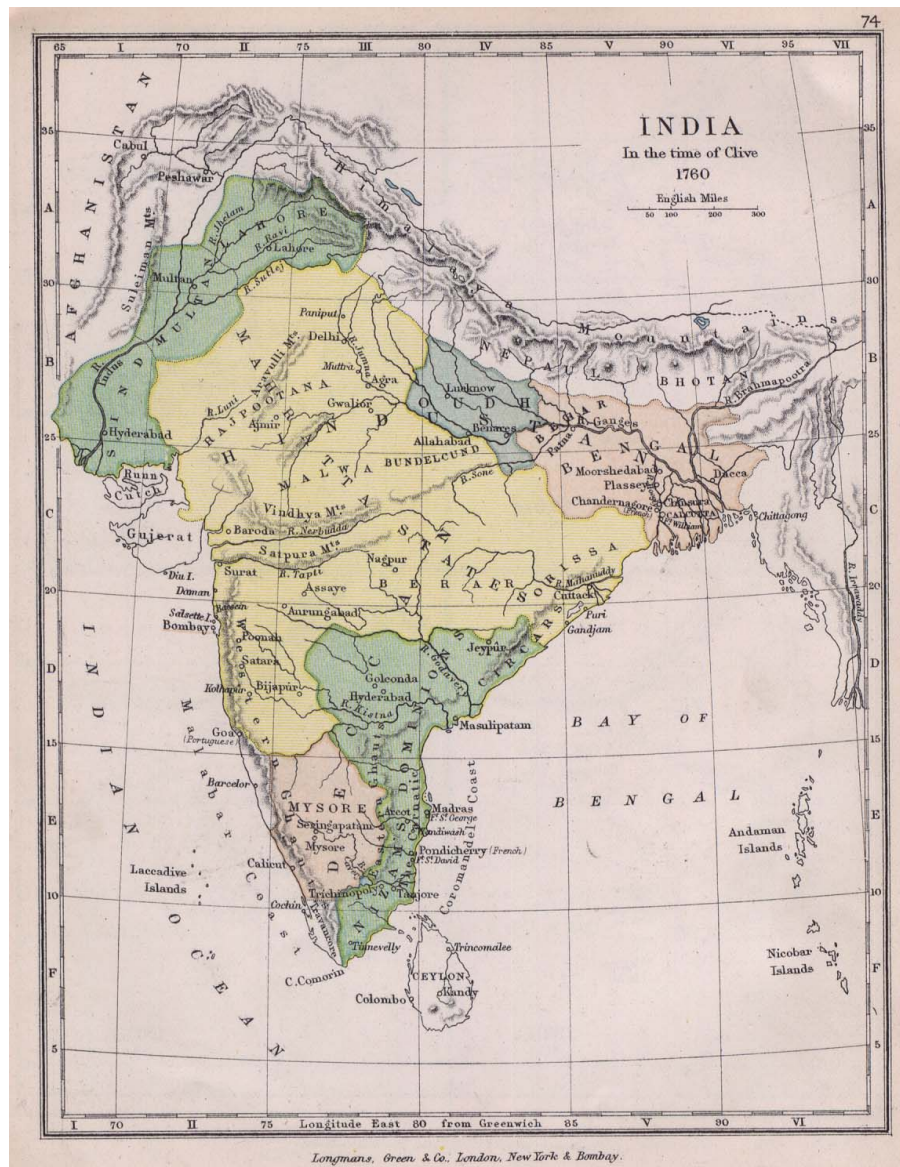


Figure 2.1 Map of India (1760). Available from the University of Texas, <http://www.lib.utexas.edu/maps> (accessed June 25, 2013).

## The Place of Music and Musical Ensembles in South India

“The place of music in man’s life is high indeed. ...It is a soul food for the higher man. ...In the emotional, mental, and higher planes, music soothes a man’s soul, transforms his being and makes him realize his divinity.”<sup>3</sup>

-Zamindar of Seithur, opening address of the Madras Music Conference, March 29, 1929

From its very beginning, Indian music and dance has maintained an intimacy with the Hindu religion and *sadhana*, religious ritual. Being so, the primary arenas for many musical forms and practices in South India were the temples and adjoining monastic courts, known as *mathas* (singular: *matham*), which, up until the mid-19<sup>th</sup> century, dominated the social, economic, and political landscape.<sup>4</sup> Music played an integral part of Hindu idol worship and ceremonial procession, being held in every temple and court in southern India, no matter its size or wealth.<sup>5</sup> The temple was the ultimate focal point of society in pre-modern South India and its relationship to the court was particularly strong – strong to the extent that their respective leaders were envisaged in reference to each other: the deity as a king and the king as a deity. The abundant wealth of the court system provided a stable base for the propagation of many South Indian cultural practices, with music and dance being of specific interest to many kings and ruling dynasties. In particular, the courts at Tanjore, Mysore,

---

<sup>3</sup> *Journal of the Music Academy*, Madras, 1929, p. 25 (hereafter *JMAM*).

<sup>4</sup> Burton Stein, *South Indian Temples* (New Delhi: Vikas Publishing House, 1978), pp. 3-4.

<sup>5</sup> P. Sambamoorthy, “Musical Instruments of Southern India,” *JMAM*, No. 1, 1930, p. 48.

Ettiyapuram, Ramnad, and Travancore, to name a few, were some of the major patrons of Karnatik musical culture until the decline of the royal court system during the 18<sup>th</sup> and 19<sup>th</sup> centuries (see figure 2.1).<sup>6</sup>

Within the temple and court, musicians and dancers were employed, often in great numbers, to facilitate ritual worship and accompany ceremonial functions. The corpus of musicians that were maintained by temples and courts comprised two primary musical ensembles: the *periya melam*, “great ensemble,” and *chinna melam*, “small ensemble.” The *periya melam* (see figure 2.2), was a musical body consisting of various wind and percussive instruments whose primary musical function was to facilitate religious ritual. The number of musical personnel in the *periya melam* varied greatly but generally consisted of 4 to 5 musicians and ranged up to as many as 30.<sup>7</sup> Comprising the ensemble was the lead instrument, the *nadasvaram*, a double-reed aerophone, along with a *tavil*, a double-headed membranophone; *sankhu*, a conch shell; *talam*, a pair of hand cymbals used to demarcate sections of the performed rhythmic cycle; and an *ottu* to provide the musical drone. The musical repertoire of the *periya melam* was primarily devotional songs and hymns that were used during the course of idol worship or ceremonial procession.

---

<sup>6</sup> Lakshmi Subramanian, “The Reinvention of a Tradition: Nationalism, Carnatic Music and the Madras Music Academy, 1900-1947,” *Indian Economic Social History Review*, 36, 2 (1999): 138. Also see S. Seetha, *Tanjore as a Seat of Music During the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> Centuries*. Madras, 1981, pp. 8-23.

<sup>7</sup> C. R. Day, *The Music and Musical Instruments of Southern India and the Deccan*. Delhi: B.R. Publishing Corporation, 1891, p. 95.



Figure 2.2 *Periya Melam* ensemble leading a procession during the Ernakulathappan festival, Ernakulam, Kerala. Photo taken by author, 2006.

The chinna melam was an ensemble whose functions were associated primarily with dance performances. This community of artists consisted of dancers, known also as *devadasis*, and their instructors, known as *nattuvars*, whom provided the rhythmic accompaniment.<sup>8</sup> Initial accounts regarding the instrumentation of the chinna melam include the *sarangi*, a bowed fiddle; *mridangam* or *tabla*, drums specific to South and North India respectively; *sruti-upanga*, drone; and *tala* or *jalra*, cymbals.<sup>9</sup> Additionally, several other percussion instruments came to be included within the ensemble such as the *kanjira*, a

---

<sup>8</sup> See Sambamoorthy, “Musical Instruments” and Day, *Music and Musical Instruments*, pp. 93-8.

<sup>9</sup> Day, *Music and Musical Instruments*, p. 97.

frame drum with single jingle; *ghatam*, clay pot; and *morsing*, a jaw harp. The musical repertoire of the chinna melam consisted primarily of *padams*, love songs, *jantis*, songs drawn from drama and dance, and *swara jatis*, musical notes, which were used to form highly complex rhythmic patterns that could be replicated through intricate foot movement in dance.

### **Social Developments and Implications during the Nayaka Kingships**

The musical developments that were initiated during the Nayaka kingships (1532-1673) in South India generated a social hierarchy among the diversity of professions within the performing arts. Throughout this time the vitality of musical culture remained dependent upon royal patronage, in particular the court at Tanjore (also known as Thanjavur), which had established itself as a major polity and arbiter of South Indian culture for many centuries prior.<sup>10</sup>

By assuming an active role in musical transmission and discourse, the Nayakas attempted to set guidelines for the standardization of musical forms and spaces alike. Musical transmission and scholarship were greatly promoted by the Nayaka kings, many of whom had formal training in music and composed

---

<sup>10</sup> The city of Tanjore, up until the decline of the court in the mid-19<sup>th</sup> century, was a major melting pot of Karnatik musical culture, with accounts of artistic benefaction from the court extending as far back as the 10<sup>th</sup> and 11<sup>th</sup> centuries. Inscriptions within the great Rajarajeshwaram Temple at Tanjore, built by the great Chola King Rajaraja I (reigned 985-1014 CE) in the beginning of the 11<sup>th</sup> century, detail that of the 850 personnel employed by the temple 400 were devadasis and 67 were musicians. See Vidya Dehejia, *Art of the Imperial Cholas* (New York: Columbia University Press, 1990), p. 64, and S. Seetha, *Tanjore as a Seat of Music*.

music themselves.<sup>11</sup> Among the most important patrons of the arts during the Nayaka realm were the poet princes Raghunatha Nayaka (1600-34) and Vijayaraghava Nayaka (1633-73). Under their initiative and sponsorship, two significant treatises regarding the standardization and canonization of Karnatik music were written: the *Sangita Sudha* by Govinda Diksitar and the *Chatur Dandi Prakasika* (1660) by Venkatamakhin, who outlined the 72 *melakartas*, or parent scales, of Karnatik music. The outlining of the 72 *melakartas* was landmark for its systematic classification of Karnatik music theory and set the precedent for the standardization of the emerging musical tradition.<sup>12</sup> As a source of reference for musicians, the *melakarta* system provided a methodical framework for musical instruction from which artists could formulate and execute melodic combinations during the course of practice.<sup>13</sup> The *melakarta* system is still in use today and remains the primary pedagogic tool for the dissemination of Karnatik music.

The standardization and canonization of musical scholarship during the reigns of the Nayaka kings was mirrored by a compound grouping of musical practice and conceptions within the musical space of the temple and royal court. Corresponding to this assemblage of musical culture was a socio-musical hierarchy that was based on patronage, training, and function of individuals within the field of the performing arts. Established in this hierarchy was a series

---

<sup>11</sup> Lakshmi Subramanian, *From the Tanjore Court to the Madras Music Academy: A Social History of Music in South India*, New Delhi: Oxford University Press, 2006, 35.

<sup>12</sup> *Ibid.*, p. 10.

<sup>13</sup> *Ibid.*, p. 35.

of implicit borders within Karnatik musical culture that defined the musical spaces and genres that were available based on an artist's socio-musical identity. Within this emerging sociology of Karnatik musical culture were court-based intellectuals who compiled, wrote, and critiqued musical treatises, court musicians who were of high-caste (Brahmin) and had access to formal musical training, and ritual singers and dancers (devadasis) who were of lower caste and whose work often navigated between the temple and court. Included within this tier of lower-caste (non-Brahmin) musicians were the performing members of the periya melam and chinna melam.

The distinction between Brahmanic and non-Brahmanic participation in Karnatik musical practice is of chief significance within the context of the temples and royal courts of South India. As mentioned earlier, music and dance shared an intimate relationship to Hindu religion and practice. The safeguarding of Hindu religious hymns, scriptures, and the effecting of religious rituals and ceremonies were long-standing practices administered by the Brahmins, a caste of priests that occupied the uppermost tier of early Indic sociology.<sup>14</sup> Because of music's close relationship with the Hindu religion and its rituals, access to musical education and transmission was afforded similarly to only those persons of higher castes. Brahmins or *bhagavatars*, musician-teachers of high caste, held the highest categories of musicians and dominated the transmission of musical forms that were seen as of higher cultural character, complexity, and devotional aesthetic. On the contrary, musicians of lower caste distinction predominantly

---

<sup>14</sup> John Keay, *India: A History* (New York: Grove Press, 2000), pp. 29-31.

played instruments that provided either rhythmic or harmonic accompaniment and were limited to the musical space and transmission of musical forms of lower artistic consideration and religious fervor.<sup>15</sup>

However, regardless of their lower social distinction, musicians hailing from non-Brahmin communities cohabitated the musical spaces dominated by members of higher social distinction. Non-Brahmin participation in musical ritual and ceremony included the performing members of the periya melam and chinna melam alike – the musicians within the periya melam belonging to a hereditary line of musicians that hailed from a caste of Telegu-speaking barbers known as Mangalavandlu while the men and women in the chinna mela were from a similar yet more amalgamated class of musicians from the Melakara caste.<sup>16</sup> Despite their marked social difference, the musical contributions afforded by the periya melam and chinna melam were of paramount importance to the effectiveness with which religious ritual and ceremony was executed.

In addition to the establishment of social roles among Karnatik musicians, a hierarchy of that which constituted “higher” musical forms in relation to “lower” forms of music also became clarified through the musical initiatives of the Nayaka kings. During this time musical forms such as the *kriti* and *kirtana*, which drew content largely from devotional poetry, had become canonized as higher classical forms. Due to their perceived higher musical aesthetic, the transmission and performance of these higher compositional forms was only

---

<sup>15</sup> See Day, *Music and Musical Instruments*, pp. 5, 95-97.

<sup>16</sup> *Ibid.*, p. 95-7.

acceptable by those persons of the uppermost social strata and confined primarily to the musical space of the monastic court. Because of their distinction as being from lower caste, the performing members of the periya melam and chinna melam were seldom given access to proper musical training from master musicians or allowed to perform the higher and often more secular art forms inherent within the milieu of the royal court. Musicians from lower caste lineages, on the other hand, were only permitted to learn “lower” musical forms, which included love songs and other songs that leant themselves to dance and drama such as *varnams*, *sabdams*, *padams*, *javalis*, and *tillanas*.<sup>17</sup>

However, because of the intimate milieu in which Karnatik musical culture was maintained, the stratification of the socio-musical hierarchy between musicians was not completely rigid, which allowed for the flux of musical information across borders of social distinction. The performance repertoire of the periya melam and chinna melam, for example, drew influence from aspects of higher and more secular art music that was showcased within the royal courts. The *kirtana*, a devotional form of that employs the frequent use of refrain; *alapana*, an a-rhythmic expository presentation of a raga, as well as detailed musical development of musical ideas intrinsic to a raga’s emotional aesthetic, or *rasa*, were musical forms and practices distinct to court music yet adopted by the periya melam and chinna melam alike. The selection of ragas performed by the periya melam was also chosen with regards to the season, time of day, and those factors deeming certain melodies or compositions as

---

<sup>17</sup> Subramanian, “Reinvention of a Tradition,” p. 136.

auspicious – a practice that is distinct within both genres of Indian classical music still.<sup>18</sup>

### **Musical Canonization and Standardization during The Maratha Kingships**

The emerging socio-musical identities of South Indian musicians were fortified more concretely during the burst of artistic creativity and output during the Maratha kingships (1676-1856). Throughout this period, the primary locus of Karnatik musical culture remained the court at Tanjore, where, like their predecessors the Nayakas, the royal courts had an active role in standardizing musical performance, scholarship, and training.<sup>19</sup> The collaborative efforts between the musician and the court throughout the Maratha kingships produced a new standard of musical grammar and instruction models for later musical generations. As well, efforts by the courts to articulate a canonical standard of *sampradaya*, traditional music, helped lead to a redefining of both the practice and profession of music in South India. Conceptions of melody, rhythm, and musical structure were redefined by the musical compositions of Tyagaraja (1767-1847), Muthuswamy Dikshitar (1775-1835) and Syami Sastri (1763-1827), three celebrated composers who came to be known as the *Trimurthy* or “Trinity” of Karnatik music. Collectively, the musical compositions of the Trinity transcended the previous notions of music, which, as I will discuss further in the

---

<sup>18</sup> Day, *Music and Musical Instruments*, p. 95-8.

<sup>19</sup> Seetha, *Tanjore as a Seat of Music*, pp. 64-88.

subsequent chapter, redefined a new musical standard that would come to influence the discourses concerning the classical aesthetic of Karnatik music.<sup>20</sup>

The musical influence of the Trinity in South India had drastic implications concerning the perception and place of the professional musician within the sociology of Karnatik musical culture. In addition to expanding greatly the musical repertoire, the transmission of higher musical forms, vis-à-vis the Trinity, was rearticulated as a primary means of *bhakti*, or devotion. Because of this association to *bhakti*, the professional musician became a romanticized figure within South Indian society, whose personal devotion to God superseded all other worldly endeavors. Tyagaraja, in particular, is noted as one of the most important and beloved composers in Karnatik music and idealized the figure of the devout musician-performer. Tyagaraja embodied his devotional pursuits primarily in his *kritis*, three-part musical forms, in which he combined the simplicity of the devotional idiom with the complexity of art music. For Tyagaraja and the other composers during the 18<sup>th</sup> and 19<sup>th</sup> centuries the *kriti* became the vehicle for both melody and personal salvation.<sup>21</sup>

In addition, the efflorescence of the Karnatik Trinity perpetuated and strengthened further the social distinctions already present within Karnatik musical culture. Throughout the Nayaka and Maratha kingships, music instruction remained a closely guarded practice. Musicians during this time were commonly drawn from families with previous ties to musical culture, with

---

<sup>20</sup> Subramanian, *Tanjore Court*, pp. 36-41.

<sup>21</sup> *Ibid.*, pp. 38-40

instruction coming typically from a family member, relative, or from a larger yet close-knit community of musicians. Tyagaraja, Dikshitar, and Sastri were all from priestly or higher castes and had been initiated into musical culture within the court systems of South India. Because of their familial heritage and social distinction, each composer within the Trinity was afforded access to proper musical training under master musicians that were employed by the royal courts. Similarly, access to musical training and the compositions of the Karnatik Trinity was heavily guarded and only afforded to those of high caste while not being available to various socio-musical identities that had emerged during this time.<sup>22</sup>

### **Social Mobility Among Performers of Non-Brahmin Communities**

With the re-articulation of musical concepts and identities during the Maratha kingships, the roles within Karnatik musical culture became more evident. Matthew Allen Harp, a noted Indo-ethnomusicologist, identifies four main distinctions that emerged within Karnatik musical culture: (1) The *God-intoxicated singer of devotional songs* – epitomized by Tygaraja – who refused payment for musical performances and teaching and considered musical practice a pursuit of religious devotion, (2) The *professional court musician*, master musicians, or *asthana vidwans*, whom were of high caste and were

---

<sup>22</sup> Such a practice of exclusivity has been a common method by Indian musicians (from both Hindustani and Karnatik traditions) to preserve the “purity” of their musical tradition. By referring to a *gharana*, school, or *parampara*, a musician identifies himself to a musical lineage that validates and asserts his or her musical authority. See Daniel Neuman, *The Life of Music*.

attached to specific courts or wealthy estates owned by *zamindars*, (3) Groups of *non-Brahmin Hindu ritual and artistic specialists*, which included the *periya melam*, *chinna melam*, and *devadasi* communities, and (4) travelling musicians that were not attached to specific temples or courts whom specialized in drama and various musical genres.<sup>23</sup>

These four social distinctions of musicians above formed a hierarchy that defined the musical genres and spaces to which an artist maintained access. However, these socio-musical barriers did not inhibit the movement and mobility of musicians of lower castes into musical spaces in which they were prohibited. Because of the overlap of musical spaces between the temple and court, *devadasis* and other non-Brahmin artists belonging to the *periya melam* and *chinna melam* were able to occupy performing positions of higher social order, such as those within the court setting. As Harp suggests, the propinquity of these socio-musical identities within the musical spaces of South India allowed for an exchange of musical information and training across hierarchical distinctions of caste and community. Accounts exist of *devadasis* and *nadaswaram vidwans*, players of the *nadaswaram*, being skilled in the art of *ragam tanam pallavi*, an elaborate musical form specific to art music that involves the melodic and rhythmic exposition of a raga, often shortened to just *pallavi*.<sup>24</sup> The celebrated Veena Dhanammal (1867-1938) and her mother

---

<sup>23</sup> Matthew Allen Harp, "Tales Tunes Tell: Deepening the Dialogue between 'Classical' and 'Non-Classical' in the Music of India." *Yearbook for Traditional Music*, Vol. 30 (1998): 37-41.

<sup>24</sup> Subramanian, "Reinvention of a Tradition," p. 142.

Kamakshi Ammal are two such musicians who, despite coming from a family belonging to the devadasi community, were afforded access to musical training with musicians of high caste and acclaim as well as higher musical forms.

### **Further Opportunities for Social Mobility during Karnatik Music's Shift from Tanjore to Madras**

Starting in the mid 19<sup>th</sup> century, Karnatik music began to undergo a great social and musical transformation. The decline of the court in Tanjore spelled the end of royal patronage for musicians and resulted in a subsequent migration of musical culture to the urban centers of colonial Madras. After being maintained under the auspices of the royal courts for centuries, music was now thrust into a milieu in which its future and transmission was dependent upon the consumption and patronage of the Indian public audience. In Madras, musical performance was used for a variety of public and private functions, but as music grew in popularity it also became a marker of status and culture for particular social spheres.<sup>25</sup> The urban elite of Madras established musical institutions known as *sabhas*, which held concerts and symposiums that helped disseminate Karnatik music to a wider audience. In contrast to the active role the monastic courts had in articulating and promoting guidelines to the standardization of musical transmission, the musical space within the *sabha* was contrastingly less regulated, which as I will show in Chapter 3, had a great impact on the

---

<sup>25</sup> Subramanian, *Tanjore Court*, p. 42.

renaissance of Karnatik music that occurred during the early decades of the 20<sup>th</sup> century.

The lack of standardization within the musical space of the sabhas provided another opportunity for the movement of non-Brahmanic musicians into the milieu of high court music. As musicians migrated to Madras, they brought with them a musical culture that was informed primarily by the musical practices of the temple and courts. In particular, the practice of maintaining a variety of percussion accompanists, whom were primarily members of the *chinna melam*, became a common performance observation. Contained within C. R. Day's *Music and Musical Instrument of Southern India and the Deccan* is an illustration entitled "A Musical Party" (Figure 2.3) that illustrates this practice. Charles Russell Day, a lieutenant of the Oxfordshire Light Infantry stationed in South India at the end of the 19<sup>th</sup> century, was one of the primary colonial writers of Indian music who influence greatly the Indian musicological discourses of the early 20<sup>th</sup> century; a topic that I discuss in further length in the next chapter. Pictured in the center of the image with his hand raised is the soloist, whom is accompanied by an ensemble of varied accompanying instruments. From left to right these instruments include the *mridangam*, *kanjira*, *veena*, (soloist), *tanpura*, *violin*, and *ghatam*.



Figure 2.3 “A Musical Party” from C.R. Day, *Music and Musical Instruments*, p. 98.

Also of note in this image is the seating of the accompanists in relation to the soloist, which reflect the socio-musical hierarchy inherent within the context of a musical performance. In this arrangement, the soloist, who would be distinguished as being from high caste, sits in the center and faces the audience directly – a position exuding the musical authority to which his social distinction ascribes. The melodic and rhythmic accompanists, whom are generally from lower caste, are oriented around the soloist in a manner that conveys both their social and musical subordination to the soloist.<sup>26</sup>

## Conclusion

By the turn of the 20<sup>th</sup> century Karnatik music had left the precincts of the monastic court and entered the public sphere. In doing so, its propagators were

---

<sup>26</sup> See Neuman, *The Life of Music*, pp. 136-144.

leaving a highly regulated and amply endowed musical space that had stressed that standardization of musical forms and spaces for one that was perpetuated by the capitalist demands of modern India. By taking advantage of their social and political circumstances, the musicians and dancers of the periya melam and chinna melam, despite being from lower social distinctions, had made their way into the musical space of higher art music, and by doing so, were forging a new socio-musical identity within the discourses of modern Indian music. However, as I will discuss in the next chapter, the musical contributions of these identities came under the scrutinizing scope of music critics and Indian musicologists, many of whom were charged with the pro-Hindu nationalist movements of early 20<sup>th</sup> century India. Together, these two factions attempted to rid Karnatik music of the influence from percussion ensembles and by doing so, allowed for the creation of a new musical space within modern Karnatik music.

### Chapter 3

#### Musical Taste, Nationalism, and Drumming: The Karnatik Percussion Ensemble in the Public Sphere

“No more is heard of the soft and restful rendering of the great passion modes, with graceful glides and long drawn notes, the favoured haunts where the spirit of the raga forever dwells! The age of *Melody* is gone; that of the *Drum*, the *Morsing*, and the *Kanjira* has succeeded!”<sup>27</sup> [original emphasis]

-Unknown author, *Journal of the Music Academy*, Madras, 1933.

Coinciding with Karnatik music’s shift to the public sphere in the late 19<sup>th</sup> century was a change in musical aesthetic concerning Karnatik performance practice that caused great controversy amongst audience attendees. The presence of *melas* and *sangeetha melam*, varied musical ensembles that consisted primarily of a variety of percussion instruments and their musical practices respectively, had come to inform and dominate the musical program of concert performances. In contrast to the songs composed by the Trinity, which Orientalist accounts of Indian music from the 18<sup>th</sup> and 19<sup>th</sup> centuries had articulated as bearing a distinct classical standard, musical practice had become *tala* (rhythm) oriented.

To the music literati of Madras, who had become the new custodians of Karnatik musical culture, the overbearing presence of percussion was the cause of the controversy concerning the ill-received shift in musical taste. While the

---

<sup>27</sup> *Journal of the Music Academy*, Madras, Vol. IV, Nos. 1-4, 1933, see editorial “The Decline of Taste” (hereafter *JMAM*).

presence of a diversity of percussion instruments was of paramount importance to the ritual musical practices of the musical spaces of the temples and pre-existing monastic courts, many within the social elite saw the incorporation of such ensembles as anachronisms associated with Karnatik music's pre-modern aristocratic patronage. More importantly, they argued, the presence of percussion ensembles in early modern Karnatik music had jeopardized the purity and solemnity with which music was once identified, sparking a fury of musicological debate concerning the classicism of Karnatik music in South India during the beginning of the 20<sup>th</sup> century.

This chapter traces Karnatik music's dissemination to the Indian public from the mid-19<sup>th</sup> century through the period of musical reform in the first half of the 20<sup>th</sup> century. During this time the musical literati of Madras took an active stance to refurbish the state of music. Influenced by the discourses of the Hindu nationalist movements of India and the Orientalizing works of colonial authors on Indian music, the realm of Karnatik music performance was assessed and subsequently modified to articulate a classical music idiom. Efforts were made to standardize and regulate the *katcheri*, or public concert, format by members of the social elite through the establishment of music appreciation societies and privately owned music associations known as *sabhas*. The ultimate arbiter of this cultural reformation was the Madras Music Academy, founded in 1928 at the suggestions of the Fourth All-India Music Conference held in Madras the year prior. Through the performance and discursive mediums afforded by the newly established academy, Karnatik music instruction and performance became

highly regulated and standardized. This reformation of Karnatik music ultimately expelled the presence of ensembles of percussion accompaniment from the classical music stage. However, due to their enduring popularity among the musical audiences of South India, such percussion ensembles remained within the music spaces of Madras and became solo performance bodies in their own right under the guise of the *Tala Vadya Katcheri*. Such percussion ensembles continued to flourish in popularity throughout the later half of the 20<sup>th</sup> century and continue today as a unique and dynamic facet of Karnatik musical culture. It is within such a musical space that the creation of the tabla tradition central to the argument of this thesis has been facilitated.

### **Finding a New Musical Space: Karnatik Music's Shift to the Public Sphere**

As Madras superseded Tanjore as Karnatik music's chief locale in the mid-19<sup>th</sup> century, it became the primary melting pot of Karnatik musical culture.<sup>28</sup> Music and musical culture had been present in Madras since the city's coming to prominence as a major colonial city in the 18<sup>th</sup> century. Occurring in the 19<sup>th</sup> century, a time when many of the disciples of the Karnatik Trinity – Tyagaraja in particular – came to settle in the city and propagate their respective traditions, the space afforded for music as a public and private form of

---

<sup>28</sup> That is not to say, however, that all musical culture left the city of Tanjore. Many musicians did in effect shift to Madras to seek other forms of patronage but often maintained ties with the musical communities in and around Tanjore.

entertainment in Madras increased greatly.<sup>29</sup> A subsequent surge in musical interest, particularly surrounding performances of *harikatha* or *kathakalaksepam*, forms of dramatic musical theatre that combine song and script, accompanied the migration of musicians and musical culture from the Tanjore court and by the turn of the century music was one of the primary forms of entertainment available to the Madras public.

Realizing that they could capitalize on the public demand for music, members of the Madras elite established musical appreciation societies that provided a medium for musical consumption and instruction by the Indian public. The first music association that was established in Madras was the *Gayan Samaj* (1883), which aimed, “to promote the cultivation of music as a domestic amusement among the Hindus who were now passing their B.A.’s [bachelors of arts] in the educational movement of the nineteenth century.”<sup>30</sup> Paralleling this agenda was a push for the inclusion of musical instruction within the curricula of select primary and secondary schools in Madras, including the Mylapore Native High School and the Maharaja Girls School.<sup>31</sup> Following the creation of the Samaj was the founding of several privately owned music associations and clubs, known as *sangeetha sabhas*. Sangeetha sabhas (also known simply as *sabhas*) were established with the similar objective to help spread musical culture to the

---

<sup>29</sup> Lakshmi Subramanian, *From the Tanjore Court to the Madras Music Academy*, New Delhi: Oxford University Press, p. 42.

<sup>30</sup> *Hindu Music and the Gayan Samaj*, Published in Aid of the Funds of the Madras Jubilee Gayan Samaj, Bombay, 1887, p. 33.

<sup>31</sup> Lakshmi Subramanian. “The Reinvention of a Tradition,” pp. 146-7.

larger public audience. The first sabha, the *Krishna Gana Sabha*, was established in Georgetown, a neighborhood in the north of Madras, in 1895, and by the 1920s a surplus of sabhas were dispersed throughout the vicinities of Madras. Members of all social classes could attend concerts and musical events at sabhas, which offered membership to the general Indian public for a monthly membership fee.<sup>32</sup> Music's popularity soared because of the new musical spaces afforded by sabhas, spaces that offered a medium for both the consumption and discourse of musical material.

In contrast to the musical spaces associated with the temples and courts, the sabha represented a distinct new socio-musical paradigm for Karnatik musical culture. As discussed in the previous chapter, because of the acute interest in music by many of the presiding kings and religious heads in courts such as Tanjore, stringent standards were placed upon the performance practice and instruction of music. Embedded within the musical space of the temples and courts was a similar musical hierarchy that had been established to demarcate disparate species of musical practice (ie. classical from non-classical forms, and non-ritualistic and ritualistic forms). The sabha, conversely, did not function with concern to the custodianship of Karnatik music, nor did it maintain an implicit musical hierarchy that segregated the musical practices of classical and non-classical musicians. Rather, this new musical space operated with regards to

---

<sup>32</sup> Lakshmi Subramanian, *New Mansions for Music: Performance, Pedagogy, and Criticism*, Delhi: Social Science Press, 2008, p. 11.

the commoditization and relative commercial value that had been placed upon Karnatik music practice in accordance with public reception and tastes.

Musical taste in Madras in the late 19<sup>th</sup> century – the time that sabha culture gained prevalence – was largely informed by the musical practices that had existed within the temple and court systems. Prior to the privatization of Karnatik music that had resulted from the demise of the Tanjore court, musical engagements for the Indian public were limited to the musical forms and spaces tied to ritual and ceremonial procession – musical spaces sonically dominated by the presence of the periya melam and chinna melam mentioned in the previous chapter. This narrow exposure to Karnatik musical culture produced an audience whose tastes were informed primarily by ritual musical practices, which were uncommon to the musical spaces maintained by that of high art music. As more and more artists migrated from Tanjore to Madras, they brought with them musical traditions that were informed by these ritual practices. Because of the familiarity and popularity of such practice by the Indian public audience, couple with the unregulated musical space of the sabha, these musical elements were incorporated within the realm of high art music and became a prominent feature in the public concert, or *katcheri*, format.

### **Sonic Implications of Sangeeta Melam on Karnatik Performance Practice within Sabha Culture**

As musical culture continued to shift to Madras, the previous musical practices associated with the Tanjore court became increasingly apparent in the

musical programs presented by sabhas. Of these musical practices, those that bore the heaviest sonic influences on music performance practice were those tied to *harikatha* and *kathakalakshepam*, two genres of musical theatre.

Together, these two musical forms gained immense popularity in Madras around the turn of the 20<sup>th</sup> century and effectively became a conveyer of musical tastes for public audiences. Performances of *harikatha*, which included elements of song and scripture alike, often employed a diversity of accompaniment instruments with which to enhance the musical ambiance and facilitate the efforts of the acting musicians in evoking the proper musical atmosphere for dramatic recitation.<sup>33</sup> Within this plethora of accompaniment instruments included the presence of a variety of percussion instruments, including the *mridangam*, a barrel-shaped membranophone; *ghatam*, a tuned clay pot; *kanjira* a single-headed membranophone covered with monitor lizard skin; *morsing*, a jaw harp; and performer of *konakkol*, the spoken articulation of rhythmic syllables known as *solkattu*.

As the popularity of *harikatha* and *kathakalakshepam* waned near the turn of the 20<sup>th</sup> century, the presence of such a percussion ensemble remained within the realm of musical performance and became an increasingly popular performance practice within the musical space of the *sabha*. In order to draw in a larger audience, and consequently higher ticket revenues, *sabha* organizers frequently programmed concert events that involved such percussion ensembles. Vocal and instrumental soloists alike, who upheld musical traditions

---

<sup>33</sup> Ibid., p. 35-7.

within the realm of higher artistic forms, began to incorporate a diversified group of percussionists into their performances despite the two groups' contradiction of representing two different "classes" of music.

However, while an artist employing such an ensemble was afforded a plethora of accompaniment options (much like that in the musical context of harikatha and kathakalakshepam) the overwhelming sonic presence of percussion ensembles came to dominate the performance practice of Karnatik music. In addition, the prevalence of such musical practices tied to ritual had established a dominance of rhythm and technical elaboration over melodic primacy. An interview of K. S. Mahadevan, a noted music critic in South India during the early 20<sup>th</sup> century, illustrates these changes in musical taste by recalling the visual and aural experiences of a concert by Naina Pillai, a stalwart musician of the time, held by the Mylapore Sangeeta Sabha in 1926. Apart from Pillai, who was a highly acclaimed vocal artist, the musical company for the concert included a violin providing melodic accompaniment, and an ensemble of percussion instruments featuring formidable artists of the mridangam, kanjira, morsing, ghatam, and konnakkol. Mahadevan comments on his musical encounter:

The experience was similar to facing a thunderclap with lightning thrown in everywhere. There was no mike (microphones had still not made their entry). The concert, which started at 4:20PM on a terrible hot Sunday, [and it] went on till 10PM. It had to be so, because just after an hour there was a full *laya* session of singing *kalpanaswaras*, starting from the mridangam, till it went on to [konnakkol]. Giving at least 5 minutes per round, you will surely understand the long duration of this concert.

One could surely call it a ‘Laya concert’ with giants of their fields all playing.<sup>34</sup>

Mahadevan’s description of a musical tempest evokes the extent to which the accompaniment detracted from the musical experience. The mention of the allotment of time given to the percussionists for a *laya* (rhythm) session offers an additional perspective as to the musical space occupied by percussion music. Finally, the suggestion by Mahadevan to call the program a “Laya concert” similarly asserts the predominance of rhythm over that of melody within performance practice. In a similar light, this description serves as a harsh critique of sabha culture, which came under increasingly scrutiny and assessment of the musical literati of Madras during the early decades of the 20<sup>th</sup> century. During this time, the expressed urgency of South Indian music critics and musicologists with regard to the reformation of musical culture sparked a series of initiatives that sought to rid elements of ritual music from the space of higher art music. In doing so, musical reformers in the early 20<sup>th</sup> century, fueled by the discourses of nationalism, aimed at rearticulating the music spaces and forms that had evolved within Karnatik musical culture.

### **Musical Custodianship in Early Modern Karnatik Music**

With Karnatik music leaving the auspices of the royal court and entering the realm of the public sector, the social elite of Madras became the primary

---

<sup>34</sup> *Ibid.*, pp. 33-4.

patrons and custodians of Karnatik music. To the members of these social communities – Brahmins, Vellalars, and Chettiars – the practice of listening to and appreciating music was held with high regard and maintained both aesthetic and cultural significances. For Brahmins in particular, the consumption of music was seen on one hand as a means of aesthetic enjoyment, and on the other as an indication of social status and an exercise in the construction of an exclusive communal identity.<sup>35</sup>

Concurrent with the rise in popularity of early modern music in Madras was an expressed need by members of the upper social classes to establish and articulate a standard of music performance. The most affective means through which the elite implemented this scheme was the standardization of the *katcheri*, or public concert. Early efforts to regulate and set formal parameters of concert programming and performance practice were made through the establishment of such musical appreciation societies as the Gayan Samaj (1883) mentioned previously. In addition to holding regular concert events, the Samaj started public programs that assisted in the publication of musical treatises and literature with which to standardize further Karnatik performance practice and instruction.<sup>36</sup> In a similar fashion, public musical soirees held by the social elite of Madras became increasingly popular following the founding of the Samaj and presented a musical space for both amateur and professional musicians to exhibit their talents.

---

<sup>35</sup> Lakshmi Subramanian, *From the Tanjore Court*, p. 43.

<sup>36</sup> Lakshmi Subramanian, *New Mansions*, p. 11.

The social elite of Madras established sangeetha sabhas with the analogous intention of setting a standard level of performance practice for Karnatik music. For the Madras elite, the sabha was the ideal institution for the governance and overseeing of Karnatik music's spread to the Indian public. Being the proprietors of these enterprises gave sabha organizers exclusive ownership of that musical information which was transmitted. However, because of the autonomous manner in which sabhas operated, efforts to establish a consensus on musical standards was relinquished in lieu of a pandering to audience tastes and demands, which, as discussed previously, were informed largely by the musical practice tied to ritual.<sup>37</sup> As P. S. Iyer (, a prominent commentator on musical matters in the early 20<sup>th</sup> century, noted in the 1920s, sabhas had been guilty of selling music to public audiences at low prices and Iyer went as far to call these concerts "cheap imitations of western societies."<sup>38</sup>

As music was disseminated to the public, notions of Hindu nationalism came to dominate the discourses regarding Karnatik musical culture. Nationalism had entered the musical realm formally in 1884 at the anniversary of the Samaj when the musical agenda of the society was expanded to emphasize the importance of identifying Karnatik classical music as part of a celebrated national heritage for the Indian public.<sup>39</sup> The fruition of sabhas and sabha culture helped significantly spread music to the public audiences of India but, in the eyes

---

<sup>37</sup> *Ibid.*, pp. 11-14.

<sup>38</sup> P. S. Iyer, *Articles on Carnatic Music*, p. 9.

<sup>39</sup> Lakshmi Subramanian, "The Reinvention of a Tradition," p. 146.

of the musical literati, this privatization and pandering to popular taste had detracted the purity and solemnity with which classical music was imagined. Towards the turn of the century, the growing prominence of Hindu nationalism within the musical discourses of classical music led to a period of musical reformation and rebirth for Karnatik music, which saw the elimination and creation of musical spaces within modern Karnatik music. The primary vehicle for this renaissance was the literary realm, in which the musical literati of Madras, informed largely by the Orientalizing accounts of Indian music by English colonials, attempted to sway audience taste and opinions in order to certify Karnatik music as a classical artistic tradition.

### **Articulating the Classical: The Influence of Orientalist Scholarship on Karnatik Musical Discourses**

In 1921-22 *The Daily Express*, a newspaper in Madras, published a series of articles that expressed with great concern the decline in standards of Karnatik performance practice and an urgent plea for its revival. Of the primary concerns of reviewers and critics alike, which paralleled the arguments of similar reformists impelled by the growing influence of Hindu nationalism, were a redistribution of musical space among classical and non-classical music forms and the fixing of a classical standard of performance practice.<sup>40</sup> Through redrawing the musical spaces of music performance, proponents of Karnatik music's reform hoped to clarify a canonical standard of performance practice

---

<sup>40</sup> Lakshmi Subramanian, *From the Tanjore Court*, p. 101.

and expunge the influence of sangeetha melam – the presence of the aforementioned ensemble of percussionists – that had detracted from music’s classical aesthetic.

The discourses surrounding the classicism of Karnatik music in the 19<sup>th</sup> and 20<sup>th</sup> centuries were impacted largely by the influence of colonial Orientalist scholarship. Numerous scholars have written extensively with regard to the impact that the writings of colonial observers, such as Sir William Jones, Captain Augustus Willard, and C. R. Day in particular, on the discourses of early modern Indian music. While an investigation into the ways in which these colonial officials assessed the musical traditions they encountered is beyond the scope of this thesis, a few points merit further mention.

Central to the Orientalist project was the romanticization of a glorified and ancient Indian past. With regard to music, Orientalist accounts stressed the importance of adherence to the ancient Sanskrit treatises that the British colonials “uncovered” during their investigations. As English colonials began to document their observations of Indian music, their narratives often included a critical assessment of musical culture that coincided with a juxtaposition of that which established the Western classical standard. The chief critical arguments present within the works of Orientalist scholarship were regarding a division between the theory and practice of Indian music and a lack of standardization (ie. musical notation) amongst music’s practitioners. Beginning with Jones’ *On the Musical modes of the Hindus* (1784), a precedent was established that glorified the ancient Sanskrit treatises of early musical information and posited

them as the arbiters of Indian musical information. Later writings, such as Day's *The Music and Musical Instruments of Southern India and the Deccan* (1891) followed in the footsteps of Jones and came to emphasize more prominently this discordant relationship between music theory and musical practice – a topic that would come to dominate the musical discourses in India during the 20<sup>th</sup> century.

Collectively, the agenda of colonialist writers set parameters with which Indian musicologists and literati used to articulate a classical musical idiom for both Hindustani and Karnatik musical genres. In North India, fueled by the arguments of the imminent Indian musicologist Vishnu Narayan Bhatkande (1860-1936), this detrimental state of music performance practice was blamed on the *ustads*, the propagators of Hindustani (North Indian) music affiliated with the Islamic courts of the Mughal Empire.<sup>41</sup> However, in South India, where the presence of the Mughal Empire was felt minimally, the downfall in musical quality was blamed on the obfuscation between the higher genre of art music that had come to be defined by the musical repertoire of the Karnatik Trinity and non-classical music forms tied to ritual practices.

From to the influence of the Orientalizing colonials, the musical contributions of the Karnatik Trinity – Tyagaraja, Dikshitar, and Sastri – came to be regarded as the very essence of what was perceived as classical music by the musical elite. In addition to the devotional fervor intrinsic within the compositions produced by the Trinity and their contemporaries, the

---

<sup>41</sup> See Janaki Bakhle, *Two Men and Music: Nationalism in the Making of an Indian Classical Tradition*, New York: Oxford University Press, 2005.

standardization and canonization that embodied their compositional repertoire exemplified classical music vis-à-vis the criteria established by Orientalist scholarship. Bhatkande himself, in his assessment of both genres of Indian music, praised Karnatik musical culture for its prowess in cataloguing and systematizing its musical information.<sup>42</sup> As the prominence of ritual music – non-classical music forms – stole the musical spotlight during music’s shift to the public sphere, calls for reform were made increasingly by music critics and literati who sought to ultimately rid Karnatik performance practice of such pre-modern musical forms and orient musical taste in favor of the Karnatik Trinity.

### **Musical Critique and Reform during the Early 20<sup>th</sup> Century**

Through the early decades of the 20<sup>th</sup> century, the onus of reform music was taken up by volunteer music conventions and lecture demonstrations. A movement for musical rejuvenation was led by the Sangit Sabha of Triplicane, the Jagannatha Bhakta Sabha of Egmore, and the South Indian Music Academy, with the *Daily Express* even going as far as to appeal to the South Indian Music Academy at providing a free, six-month preliminary training course to aspiring young vocalists.<sup>43</sup> Measures that such organizations took to rearticulate the classical aesthetic of Karnatik music included a focus on vocal training with a greater priority given to lyrics and toning down of percussion accompaniments. As one writer in the *Daily Express* wrote, “How often have we seen a really good

---

<sup>42</sup> *Ibid.*, p. 105.

<sup>43</sup> Lakshmi Subramanian, “The Reinvention of a Tradition,” p. 151.

performance incessantly interrupted by the noisiest drummer who believes in the strength of his brawny arm and goes away pounding with his might and main?"<sup>44</sup> The issue of the proper number and aural presence of percussion accompaniment was of key contention throughout the musical discourses in South India during the 1920s and became a key initiative within the efforts of the nationalist reformers.

The call for musical reform reached its apex at the fourth All-India Music Conference (AIMC), held in Madras in 1927.<sup>45</sup> During the four-day conference, the primary topics of discourse included many of those posited by Orientalist investigators: the placement of *srutis* (musical microtones), the connecting of theory (*lakshana*) with practice (*lakshya*), and the need to standardize musical instruction and performance practice. On day four of the conference, M. S. Ramaswamy of Bangalore, in his presidential address, articulated an agenda encouraging the reform of instruction, transmission, articulation, and preservation of Karnatik music. Stated outright in Ramaswamy's address was a need to diminish the sonic presence of percussion instruments in classical performance practice.<sup>46</sup> Such suggestions attracted great support from the members and participants of the AIMC, many whom supported the measures set forth by the nationalist reformers. At the conclusion of the conference a proposal

---

<sup>44</sup> Iyer, *Articles on Carnatic Music*, pp. 56-7.

<sup>45</sup> The first All-India Music Conference (AIMC) was held in Baroda, a city in the northern state of Gujarat. Subsequent meetings of the AIMC were held in 1918 (Delhi), 1919 (Benares), and 1924-25 (Lucknow).

<sup>46</sup> M. S. Ramaswamy, "Music Performance, Teaching of Music, Etc," Madras, *JMAM*, Vol. I (1929): 31-4.

was suggested by its attendees for the establishment of a music academy to implement and uphold such reforms as detailed by Ramaswamy while also becoming the superior authority on music related matters.

The following year the Madras Music Academy (hereafter *MMA*) was founded and became the ultimate cultural arbiter of Karnatik music. The primary aims of the academy were to foster and encourage music talent as well as to articulate a classical standard of performance practice.<sup>47</sup> In addition to its curriculum and concert programs, the MMA also prompted an annual conference, the Madras Music Conference (hereafter *MMC*) in which music scholars and cognoscenti could engage in discourses surrounding Karnatik music theory and practice. These proceedings and papers given at the MMCs were subsequently catalogued in *The Journal of the Music Academy, Madras*, an annual journal that was published and distributed by the academy itself to help spread further the musical agenda of the MMA. Also published in the journal were selections from periodicals and editorial opinions that helped further inform the musical tastes and demands of its readers.

Of the agendas that dominated the initial meetings of the MMCs was a continued effort to diminish the presence of the rhythmic accompaniment. Percussionists came under harsh scrutiny by presenters at MMC meetings and contributors to the academy's journal alike. During the 1933 conference, G. V. Narayanaswami Aiyar, a member of the expert committee within the music academy, presented a paper entitled "The Mechanization of South Indian Music,"

---

<sup>47</sup> Hon'ble U. Rama Rao, "The Music Academy," Madras, *Ibid.*, 23-5.

in which he commented on percussionists as providing mere “thrills and excitement” during the course of a performance while offering little musical content of classical merit. In his paper, Narayanaswami romanticizes the former generations of Karnatik musicians who “were not in need of any extraneous help in the shape of unnatural, unmusical instruments like the *Kanjeera*, *dolak*, *Morsing*, etc.”<sup>48</sup>

Similarly, the overbearing aural presence of the percussion accompanists was raised in the welcome addresses of the 1935 and 1938 music academy conferences. V. S. Srinivasa Sastri re-asserted the motives behind the founding of the music academy in diminishing the presence of the rhythmic accompaniment in his opening speech at the 1935 MMC, which expressed his distaste for the overwhelming tendency of percussionists to overextend their musical liberties in performance of their *avarta* (solo). Sastri argued that such practices within sabha culture were pandering to archaic music practices that favored the “vulgar” musical tastes of the misinformed public audiences.<sup>49</sup> In a similar fashion, K. V. Krishnaswai Aiyar, in his welcoming address to the 1938 MMC, further described the overbearing aural experiences of the “din of too many accompaniments,” expressing that music performance had become more of a public spectacle rather than an expression of a high art.<sup>50</sup>

---

<sup>48</sup> G. V. Narayanaswami Aiyar, “The Mechanization of South Indian Music,” Madras, *JMAM*, Vol. (1933): 154-7.

<sup>49</sup> V. S. Srinivasa Sastri, Welcome Address, Madras, *JMAM*, Vol. (1935-37): 159-62.

<sup>50</sup> K. V. Krishnaswami Aiyar, Welcome Speech, Madras, *JMAM*, Vol. 10 (1939): 1-5.

Following the musicological discourses of the 1930s, a conscious effort to minimize the aural presence of rhythmic accompanists was sanctioned by a majority of Karnatik practitioners. Through the collaborative efforts of the MMA and musicians alike, concert programs became restructured to include fewer ensembles of percussionists and define a proper accompaniment standard. Legendary vocal artists of the time such as Tiger Varadachariar (1876-1950), Muthiah Bhagavatar (1877-1945), and Ariyakudi Ramanujam Aiyer (1890-1967) helped place higher standards for Karnatik performance practice, which in turn had also lessened the use of percussion instruments. Additionally, these artists helped re-establish the prominence of melody – specifically the sonic conceptions tied to the voice – that had been overshadowed by a prioritization of rhythm and had remained as a key tenet within the musical agenda of the nationalist reformers.<sup>51</sup>

Effectively, the MMA and its propagators re-stratified the organization of Karnatik performance practice into a hierarchy of musical roles. Inherent within this hierarchy was a stressed order of music practice that placed rhythmic and melodic accompanists alike in a subordinate position to the soloist: a matter that greatly influenced the performances practices of each respective musician. With the change in musical texture afforded by the toning down of percussion, accompanists were encouraged to observe greater sensitivity with regard to the soloist. As Subramanian suggests, the change in musical conception had implications for the musical material provided by rhythmic accompanists,

---

<sup>51</sup> Lakshmi Subramanian, “The Reinvention of a Tradition,” p. 160.

whom, “negotiated effectively and sensitively to the emerging ideas of sound and aural refinement, and that they endorsed the larger idea of pursuing the voice within the instrument, the drum, which they beat.”<sup>52</sup> In comparison to the percussion ensembles previously maintained by soloists, the use of a single rhythmic accompanist – most often a mridangam – became the new standard in higher art music while the presence of additional percussion instruments rendered performances less than classical.<sup>53</sup>

### **Percussion Ensembles in Modern Karnatik Music: The Tala Vadya Katcheri**

Although solo artists found it apposite to maintain only a single rhythmic percussionist, the expulsion of large percussion ensembles from the musical space of the classical Karnatik concert did not spell the end to the practices associated with such ensembles. Accompanying ensembles of varied percussion instruments left the realm of classical music stage and, because of their popularity and familiarity with Indian public audiences, were able to forge a new musical space in modern Karnatik music known as a *Tala Vadya Katcheri*, which is translated as “rhythmic music concert” but also used to refer to “solo” percussion ensembles.<sup>54</sup> Following the expunction of large ensembles of percussion accompaniment from the musical stage through the aforementioned musicological reforms in South India, many of these ensembles formed their own

---

<sup>52</sup> Lakshmi Subramanian, *New Mansions*, P. 68.

<sup>53</sup> Amanda Wideman, *Singing the Classical, Voicing the Modern*, Durham: Duke University Press, 2006, p. 102.

<sup>54</sup> Can also be spelled *Taal Vadya Katcheri*.

autonomous performing bodies. The term “Tala Vadya Katcheri” came to represent both the communal identity of these percussion ensembles as well as the name of their performances. For percussionists, the Tala Vadya Katcheri is a performance medium that, despite being placed outside of the realm of the “classical,” became an extremely dynamic and inclusive musical form within the greater continuum of Indian and global musical culture.

In the performance of a Tala Vadya Katcheri, artists are afforded major solo interludes in which to express and develop themes as well as portray their own individual artistry. Unlike the musical space of classical music, which in the beginning of the 20<sup>th</sup> century became heavily regulated by such establishments as the MMA, the Tala Vadya Katcheri is a musical form that does not delimit musical participation based on notions of classical or non-classical aesthetics. Amidst the music interplay, artists perform a variety of pre-composed and improvised musical material. Similarly, artists often express and elaborate rhythmic themes that other musicians or themselves have performed. Although no hierarchy of musical roles governs the musical space of the performance like in the classical music setting, a Tala Vadya Katcheri will have a leader, typically a mridangam artist, who serves as an musical leader who drives the performance direction. The leader will be the primary provider of thematic material with which the other participating musicians can elaborate or improvise. As the performance draws to its end the leader of the performance will initiate a *koraippu*, in which artists engage in a cyclic reduction of musical interplay resolving with a *mora*, a cadential form marked by repeating a phrase or

rhythmic pattern three times, which results in a dramatic arrival on *sam*, the downbeat.

Incongruent with the musical practices related to raga and solo Karnatik music performance, the musical space of the Tala Vadya Katcheri is much less stringent with regards to musical participation than its melodically oriented counterpart. Rather, the The inclusive artistic environment afforded by the Tala Vadya Katcheri allows for the incorporation and integration of musical forms parallel to as well as distinct from Karnatik music. A performance of a Tala Vadya Katcheri can include, but is not limited to, the gamut of percussion instruments that inhabit the performance practice of Karnatik music, namely the mridangam, ghatam, kanjira, morsing, and konnakol. Percussion instruments from Hindustani music such as the *tabla* and perhaps to a lesser extent the *pakhawaj*, a barrel-shaped membranophone specific to the austere and ancient musical form *dhrupad*, have become commonplace within Tala Vadya Katcheri performances. During my own experiences attending performances of Tala Vadya Katcheris in India I observed many other Indian folk drums, such as the *nal*, a barrel-shaped membranophone similar to a mridangam, *udukkai*, an hourglass shaped membranophone, and the *tavil* used in the course of a performance. Melodic instruments, such as the *sitar* of Hindustani music and the electric mandolin, an instrument subsumed into Karnatik music by the legendary virtuoso U. Srinivas, can similarly participate in a Tala Vadya Katcheri and engage in the musical interplay although the aesthetic of the performance relies on the primacy of rhythm in lieu of melodic profundity.

Recordings of two performances of the Tala Vadya Katcheri from the 1960s illustrate the dynamic artistic palette inherent within this musical space. The tracks, both assuming the title of this new musical form, appear on a record produced by the famous tabla artist of the Punjab *gharana*, Ustad Allah Rakha (1919-2000). Apparent in both tracks is a musical interplay featuring a variety of Karnatik and Hindustani percussion instruments, including the mridangam, morsing, ghatam, and kanjira from the former and the tabla and pakhawaj from the latter. Providing the *nagma*, a recurring melody outlining the rhythmic framework of each performance, is a *sarangi*, a bowed fiddle particular to Hindustani music, and a harmonium. Throughout each track the musicians engage in a musical exchange during which each performer performs a variety of composed and improvised musical forms that define the performance practices of each respective instrument. Those artists playing Hindustani instruments – the tabla and pakhawaj – play specific musical repertoire to their performance practices, such as the *kaidas* (theme and variation compositions), *gats* (short thematic compositions), *chakradars* (rhythmic phrases that are repeated three times with the final note of the last repetition arriving on the downbeat), and elaborations of the *theka*, a recurring pattern used to outline a rhythmic cycle. The Karnatik musicians – the mridangam, morsing, ghatam, and kanjira – play different musical forms specific to Karnatik performance practice such as the *korvai*, a “strung together” cadential form combining an elaboration of different phrase-patterns, *mora*, another cadential form marked by the repetition of a phrase or pattern three times, and elaborations of *nadais*, a “gait” or musical

form outlining the subdivisions of a metric cycle. As the performances draw to their respective close, the respective leader (both performance in which are the Hindustani musicians) initiate the koraippu, in which the solo space afforded to each musician gets progressively short until the point when each performer is performing only a portion of the rhythmic cycle. Concluding the performances is a mora resulting with an arrival on the downbeat.

The incorporation of elements of Hindustani and Karnatik performance practice in a similar musical space was a breakthrough phenomenon regarding the performance practices of Indian classical music. Although the two genres of Indian music share an identical foundational, the separation in performance practice that formed between because of the different socio-musical environments in which each tradition evolved frustrates attempts at inter-cultural collaboration between artists of the two traditions. Despite using the same nomenclature with which to label their musical information (ie. raga, tala, svara, sruti, etc), the melodic and rhythmic principles of Hindustani and Karnatik performance practice are largely incongruent. Indeed, one would not likely witness solo artists from both genres sharing the same musical performance space. However, as stated earlier, the musical space of the Tala Vadya Katcheri maintains more flexibility than the melodic realm with regard to inter-cultural musical collaboration.

It is the inclusive nature of the Tala Vadya Katcheri that has facilitated the efforts of my teacher, Sundar Nagarajan, in incorporating the performance practices of the tabla into the milieu of Karnatik music. By doing so he has

established a new musical paradigm for the solo tabla and developed a unique musical tradition that synthesizes musical concepts of both Indian musical genres. It is this tradition that forms the premise of my thesis, which I discuss further in Chapter 6.

## Chapter 4

### A Social Network: Implications Regarding Tabla Gharanas

The notion of *gharana* is of major controversy within the discourses of Hindustani musical culture and indeed the tabla as well. Originally a term used to socially classify those musicians of the utmost social category, *gharana* has since come to be used to identify distinct lineages and musical traditions of all categories of musical practice. Many scholars and musicians alike argue with regards to the parameters dictating the existence and individual association with the concept of *gharana*. In this chapter I examine the different practices with which scholars and musicians have identified the different schools of performance practice of the tabla. In doing so, I will address the discourses concerning the levels of social categorization for *tabliya*, players of the tabla, and their relevance to the artists discussed within the context of this thesis.

#### Levels of Socio-musical Organization for Tabliya

The notion of *gharana* is a subject that occupies a large share of the discourses involved within the field of Indo-ethnomusicology. The term, derived from the root “*ghar*” meaning “house,” is a unit of social organization within the milieu of Hindustani music that categorizes a specific hereditary or pedagogical lineage of musical transmission.<sup>55</sup> Daniel Neuman, who has written at

---

<sup>55</sup> Since both Hindustani and Karnatik music have been disseminated in the oral medium, the question of authenticity has given rise to an implicit need for artists to identify the genesis of their musical heritage. In Hindustani music this need

considerable length and detail regarding gharanas, argues that the use of the term “gharana” by musicians to identify to a distinct musical lineage rose to prominence as a result of Hindustani music’s shift to the public sphere during the 19<sup>th</sup> and 20<sup>th</sup> centuries.<sup>56</sup> During this time artists began referring to their musical lineage, which was often referred to with regard to the geographic place of origin of the tradition’s origin, such as Agra, Delhi, or Lucknow. For these musicians, membership to a gharana was an adaptive device by which to consolidate and safeguard musical knowledge in response to the increased competition of other musicians within the public realm.<sup>57</sup> The primary criteria of a gharana, as Neuman identifies, are the following:

- (1) A gharana is comprised of a core family (*khandan*) of musicians whom pass their tradition from generation to generation through their students.
- (2) The founder of a gharana must have a distinguishing personality.
- (3) At least one member of the original *khandan* must be living.
- (4) The gharana must also have at least one famous personality who is alive.
- (5) At least three generations of distinguished musicians have passed on the musical tradition.
- (6) The gharana must have a distinguished musical style from other traditions or gharanas.<sup>58</sup>

---

was largely filled by the term *gharana*, to which a musician attributed their musical authority. This term has not been used in Karnatik musical culture, in which musicians will often refer to their respective school (*bani*) or *parampara* (lineage).

<sup>56</sup> Daniel Neuman, “Gharanas: The Rise of Musical “Houses” in Delhi and Neighboring Cities,” in *Eight Urban Musical Cultures: Tradition and Change*, edited by Bruno Nettl, Urbana: University of Illinois Press, 1978, p. 187.

<sup>57</sup> Dard Neuman, *A House of Music: The Hindustani Musician and the Crafting of Traditions*, (PhD Diss., Columbia University, 2004), p. 233.

<sup>58</sup> Daniel Neuman, *The Life of Music in North India*, Chicago: University of Chicago Press, 1980, pp. 145-160.

In addition to the above criteria, Neuman states that “Gharanas as stylistic schools are represented only by soloists, not accompanists”<sup>59</sup> Furthermore, the presence of a musician from an accompaniment caste or community in an a musician’s family tree was enough to render their claims to gharana membership invalid. Rather, Daniel Neuman identifies the terms *biridari* (brotherhood) and *baj* (style) as a means of social and musical categorization for those musicians performing accompaniment instruments respectively. However, investigations into the socio-musical milieu of tabla culture have shown that tabla artists, while largely accommodating to the six primary points listed above, have largely rejected Neuman’s claims to the exclusive ownership of the term gharana by solo musicians. Kippen’s investigations into the tabla tradition of Lucknow refute Neuman’s arguments, stating that the terms biridari and baj are larger encompassing terms that lack socio-musical distinction and are used less often by musicians in favor of gharana.<sup>60</sup>

Indeed, it is common practice amongst contemporary musicians and scholars alike to refer to the distinct styles of tabla under the heading of gharana. The popularity of tabla culture within Hindustani music during the 18<sup>th</sup> and 19<sup>th</sup> centuries gave rise to a plurality of musical repertoire that currently fall under the banner of one of six primary traditions: the Dilli (Delhi), Ajrada, Lucknow, Farukhabad, Benaras, and Punjab gharanas. Historically, the Dilli gharana is

---

<sup>59</sup> *Ibid.*, p. 155.

<sup>60</sup> My own experiences with tabla artists in India yielded similar opinions regarding the practice of artists to use ‘gharana’ to refer to their musical tradition. See James Kippen, *The Tabla of Lucknow*, New Delhi: Manohar Press, 1988, pp. 64-5.

considered the oldest school of tabla, starting in the beginning of the 18<sup>th</sup> century. Up until the decline of the court system in North India during the mid-19<sup>th</sup> century onwards, tabla performance practice was spread to a series of prominent royal courts throughout North India by disciples of Delhi tabla artists and developed into the five other tabla gharanas. These distinct schools of practice ultimately came to be named after the royal courts and cities in which they were developed. Amidst this diaspora of tabla culture three distinct styles (*baj*) of tabla emerged: the *Dilli* style of tabla, which favors the clarity of prominent sonorities produced on the *kinar*, *sur*, and *shyahi* portions of the tabla *pudi* (skin) and includes the Dilli and Ajrada gharanas; the *Purab* (Eastern) style, which emphasize the blending of *sur* and *shyahi* sonorities with the complexity of the *bayan* and include the Lucknow and Farukhabad gharanas; and the *pakhawaj baj*, which, being influenced by the performance practice of the *pakhawaj*, stress much bolder sonorities of bols and include the Benaras and Panjab gharanas.

### **Tabla Gharanas in the Late 20<sup>th</sup> and Early 21<sup>st</sup> Centuries**

Although the six recognized traditions of tabla emanated from the same genesis, the repertoire and performance techniques of the six tabla gharanas ultimately became diversified by the musical taste – the Lucknow gharana being influenced by the prominence of Indian kathak dance within the court at Lucknow for example – and the extraordinary individuals who propagated these musical traditions. The anthologies of solo tabla repertoire collected and

transcribed by Gottlieb and Wegner, two Indo-ethnomusicologists specializing in the study of tabla performance practice, illustrate the distinguishing aesthetics of each individual tabla gharana. Gottlieb's work in particular, based on solo recordings from the mid 1950s and early 70s, has been instrumental in articulating the sonorities, technical nuances, and key repertoire that distinguish each gharana. Booth's work regarding the oral nature of tabla dissemination, however, suggests that the notion of gharana as a marker of a distinct performance practice has lost much weight for practicing artists in the latter part of the 20th century.<sup>61</sup> Interviews Booth conducted with several formidable tabla performer-pedagogues in the 1980s reveal that while often artists try to retain some aesthetic of their original gharana, practiced artists of the tabla are expected to be adept in the major styles of tabla performance; only artists of major fame and distinction practice one particular style. Booth's informants argue that such musical expectations have created a style of performance that has assimilated the different techniques of the individual gharanas, making the claim to a single gharana identity difficult for many. Many tabliya argue further that advances in increased recording and broadcasting technologies have facilitated this practice, making it easy for artists and listeners to absorb the musical repertoire and performance styles of prominent performing musicians.<sup>62</sup>

---

<sup>61</sup> Gregory Booth, *The Oral Tradition in Transition: Implications for Music Education from a Study of North Indian Tabla Transmission*, Unpublished Ph.D. Dissertation: Kent State University, 1986, pp. 310-3.

<sup>62</sup> *Ibid.*, pp. 167, 312.

That is not to say that the repertoire and performance practice of tabla has become assimilated throughout; indeed it has not. To make such an argument would be to strip the traditions of tabla performance practice of the imaginative and creative efforts of its many past and present propagators. It is my argument in this thesis that pockets of individual creativity and expression exist within the diaspora of tabla culture that originated from the six recognized gharanas of tabla performance. My assertion that these traditions deserve further individualized identification is a continuation of the practices of numerous musicians and scholars alike in bringing to light the innovations and contributions of contemporary tabla practitioners who have continued to enrich an already lively musical tradition. While these individuals may maintain musical (or often political) motives behind asserting claims of gharana identification or authenticity, my arguments are based with regard to the musical repertoire of each tradition and its ability to correspond to or distinguish itself from orthodox practice.

### **Additional Tabla Gharanas**

The debate as to the importance and existence of tabla gharanas is one that is heartily contested by tabla artists and scholars alike today. In contrast to the claims of Booth's informants, other tabliya and scholars have argued for the presence and recognition of additional gharanas within the diaspora of tabla culture. Claims of additional gharanas such as the Kothiwal gharana, a tradition of tabla that shared the musical spaces of Lucknow with those tabliya associated

with the Lucknow gharana, and the Qasurwale silsila, the lineage of Mian Fateh Din Qasur, a famous performer-pedagogue of the Pakistani Panjab,<sup>63</sup> are often asserted but are selectively recognized by an account of their closer relationship to previously existing gharanas. Of the two tabla artists discussed in this thesis – Rajesh Dhawale and Nagarajan Sundar – only Dhawale identifies himself as a gharana musician.

The possible motives behind these socio-musical distinctions are particular with respect to each artist. For Dhawale, the association to a gharana further distinguishes himself from other tabla artists within Chennai. Tabla has indeed become a popular instrument within many classical and non-classical musical spaces of Chennai, with many amateur and professional musicians alike disseminating its performance practice. By assuming the socio-musical identity of the Mehboob Khansaheb gharana of tabla, a parampara within the Farukhabad gharana, Dhawale authenticates himself as a unique musical authority in relation to other tabla propagators and traditions also existing in Chennai.<sup>64</sup>

In contrast, Nagarajan Sundar does not identify himself by his connection to a gharana, but will on occasion add the title “Tabla” before his name to further

---

<sup>63</sup> See Kippin, *Tabla of Lucknow*, pp. 81-5, and Lowell Lybarger, *The Tabla Solo Repertoire of Pakistani Panjab: An Ethnomusicological Perspective*, Unpublished Ph.D. Dissertation: University of Toronto, 2003, p. 103-9.

<sup>64</sup> The naming of a gharana after an individual – in Dhawale’s case to Mehboob Khan, a renowned tabliya from the region of northern Karnataka – in lieu of a geographic locus is a growing practice among many contemporary Hindustani musicians of both solo and accompaniment instrument traditions.

identify himself and his trade.<sup>65</sup> Also, it must be noted that Sundar does not refer to his tabla tradition as the “Karnatik Tabla.” At times during our musical lessons and interactions Sundar would refer to repertoire and patterns of his that incorporated those musical aesthetics central to Karnatik composition as being of the “Karnatik style.” My coining of the label “Karnatik Tabla” is motivated by these notions as well as the presence of Karnatik compositional devices within tabla repertoire composed by Sundar (see chapter 6). It would be possible to argue that, based on the criteria necessary for a gharana’s existence set forth by Neuman, the tabla tradition of Sundar Nagarajan could be considered a separate gharana from the already established six – a *karnatik gharana*, perhaps. Indeed Sundar is a vibrant and distinguished musical personality from a family of musicians who propagates a very unique tradition of tabla that distinguishes itself from the orthodox. However, I do not argue for the recognition of a new gharana of tabla for such a label carries little cultural weight for an artist such as Sundar given the socio-musical milieu of Karnatik music (see chapter 3). Sundar has forged his career and musical identity largely through the participation in the musical space of the Karnatik percussion ensemble. The musical authority with which Sundar asserts his tradition is derived from his knowledge of both Hindustani and Karnatik music and his ingenuity in combining these two musical idioms within this unique musical space.

---

<sup>65</sup> The practice of adding the title “Tabla” before an artist’s name is a common occurrence that I observed during my encounters with multi-percussionists in Chennai that were adept in both Karnatik and Hindustani (tabla) traditions.

## **Conclusion**

Because of the unique socio-musical milieu and contexts in which Rajesh Dhawale and Nagarajan Sundar propagate their traditions of tabla performance, each artist bears a different relationship to the socio-musical identity of gharana. For Dhawale, his identification as a gharana musician helps him distinguish him and his trade from the plethora of other amateur and professional tabla artists in Chennai. On the other hand, Nagarajan Sundar's identity as a musician in Chennai has been facilitated by the unique musical space of the Karnatik percussion ensemble.

## Chapter 5

### The Mehboob Khansaheb Gharana of Tabla

In the following two chapters of this thesis I analyze the two primary traditions of tabla that have formed my base of knowledge governing their performance practice. Through an analysis of collected repertoire and live performances, I will illustrate the different compositional methods by which my two tabla teachers articulate their individual traditions. While the focus of the first portion of this thesis involved the socio-musical milieu of Karnatik music, my focus on the repertoire of the tabla in the second half of my thesis will deal with concepts relating to Hindustani music.

The repertoire herein includes both theme-and-variation and fixed compositional forms of the tabla repertory. In specific, these musical analyses will focus on the ways in which thematic development occurs within the context of each artist's compositions. In doing so I will articulate two divergent traditions: one that identifies itself as a continuation of a hereditary musical lineage extending back several generations; and the other, an innovative tradition that has adapted a similar musical tradition to the musical spaces of modern Karnatik music.

This chapter and the subsequent chapter will shift focus to the musical idiom of Hindustani music, also known as North Indian music. In this chapter I investigate the tabla tradition of Rajesh Dhawale, a former colleague and tabla teacher of mine. Dhawale is a representative of the Mehboob Khansaheb gharana, a lineage of tabla performance practice located within the Farukhabad

gharana of the purab baj. Through an analysis of collected repertoire and a live solo performance, I will illustrate various rhythmic and aural concepts that help articulate the musical aesthetics and style with which the Mehboob Khansahab gharana of tabla playing is propagated. Such a musical analysis will elucidate the compositional approaches through which this lineage of musicians defines its repertoire amongst other contemporary tabla artists and traditions. Prior to doing so, a discussion of concepts pertaining to Hindustani *tala* (rhythm) and tabla composition is necessary.

### **Principles of Hindustani Taal**

For the musical repertoire analyzed in this thesis, a distinction between the rhythmic frameworks of Hindustani and Karnatik must be made. This chapter includes analyses of musical repertoire within the Hindustani musical idiom. The musical analyses in the subsequent chapter analyzes musical repertoire within both Hindustani and Karnatik musical frameworks.

In Hindustani music, compositions are placed within a recurring metric framework known as *taal*. Within the structure of taal is a set number of units or beats, known as *matras*, that are grouped together into various divisions known as *vibhags*. The structures of taal are delineated by the alternation of vibhags of greater and lesser musical emphasis, known as *tali* and *khali* respectively.<sup>66</sup> This distinction of greater and lesser musical emphasis is created by the differing

---

<sup>66</sup> This alternation of phrases of greater and lesser emphasis is also known as *khula-bandh*, meaning “open” and “closed” respectively.

sonorities of the tabla within the *theka*, a recurring drum pattern whose *bols* (individual or combined strokes of the tabla) outline a tala's structure. During the tali portions of a rhythmic cycle the theka consists of bols played with both drums of the tabla – the *tabla* and *bayan*. In contrast, the khali (lit. “empty”) sections are characterized by a theka consisting of bols performed using only the tabla or right hand drum. The lack of the aural presence of the bayan, the left hand drum that is lower in tessitura to that of the tabla, provides a distinct aural contrast to the tali sections and is necessary for the structural demarcation of the rhythmic cycle. In its entirety, one rhythmic cycle is known as an *avarta*, meaning “enclosure.” Hundreds of taals exist within Hindustani music, ranging from three matras in length to one hundred and eight matras, but within contemporary practice ten to twelve taals are of common use. Within this thesis, the taals that will be discussed are *teentaal*, a 16-matra taal whose structure is divided 4+4+4+4, and *jhaptaal*, a 10-matra taal that is divided 2+3+2+3. The arrangement of the rhythmic structure and subdivisions of these two taals is illustrated in Figure 5.1 (see opposite page).

One avarta of teentaal:

Matra:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Notation:	X				2				0				3			
Vibhag:	<i>Tali</i>				<i>Tali</i>				<i>Khali</i>				<i>Tali</i>			
Counted:	Clap				Clap				Wave				Clap			

One avarta of jhaptaal:

Matra:	1	2	3	4	5	6	7	8	9	10
Notation:	X		2			0		3		
Vibhag:	<i>Tali</i>		<i>Tali</i>			<i>Khali</i>		<i>Tali</i>		
Counted:	Clap		Clap			Wave		Clap		

Teentaal theka:

X	Dha	Dhin	Dhin	Dha
2	Dha	Dhin	Dhin	Dha
0	Dha	Thin	Thin	Tha
3	Tha	Dhin	Dhin	Dha

Jhaptaal theka:

X	Dhin	Na
2	Dhin	Dhin Na
0	Thin	Na
X	Dhin	Na

Figure 5.1 *Teentaal* and *jhaptaal* avartas and thekas

### Musical Aesthetics of Hindustani Tabla Repertoire

Involved in my musical analysis in the remaining chapters are a variety of theme-and-variation and fixed compositional forms that fall within the contemporary tabla repertory. Of these forms that are discussed are the *kaida*, *gat*, and *chakradar*. The *kaida*, which translates as “procedure” or “rule,” is a

theme-and-variation style composition and is perhaps the most fundamental and important compositional form of the tabla repertory due to its great scope of improvisation (*vistar*). Contained within the performance practice of a kaida are the main theme itself (known as the kaida) and a series of variations on the primary theme (known as *paltas*). Concluding the performance of a kaida is a *tihai*, a pattern or phrase that is played three times with the ultimate note of the final repetition landing on the *sam*, downbeat. The *gat* and *chakradar* are fixed compositional forms that do not entail improvisation within their performance practice. A *gat*, meaning “composition,” is a musical form that is comprised of a thematic body of musical material that often concludes with a *tihai*.<sup>67</sup> A *chakradar*, translated as “having circles,” is an appended *tihai* that consists of a thematic body of musical material concluding also with a *tihai*. Together, this entire body of musical material is repeated three times with the final note of the ultimate repetition arriving on the *sam* (downbeat).

The analyses of these musical forms in this thesis are concerned with the development and subdivisions of thematic material within the context of an individual composition. To illustrate my point I begin with a brief analysis of a kaida bestowed upon me by Dhawale during my musical lessons. In doing so I discuss the relationship of the musical phrases comprising the compositional

---

<sup>67</sup> Of the compositional forms within tabla repertory, the *gat* is perhaps the most difficult to define because of its wide scope for thematic development and variation. See Robert Gottlieb, *The Major Traditions of North Indian Tabla Drumming*, Salzburg: Musikverlag Emil Katzwichler, 1977, p. 51, and James Kippen, *The Tabla of Lucknow: A Cultural Analysis of a Musical Tradition*, Delhi: Manohar Publishing, 1988, pp. 185-92.

form to those inherent divisions within the rhythmic framework in which it is composed.

Tali:	X	DhaSGiDaNaGa	DhitSGiDaNaGa	DhitSGiDaNaGa	DhitSGiDaNaGa
	2	DhaKittakDhir	DhirDhirKittak	DhirDhirKittak	ThaTirkittak
Khali:	0	ThaSKiDaNaKa	ThitSKiDaNaKa	ThitSKiDaNaKa	ThitSKiDaNaKa
	3	DhaKittakDhir	DhirDhirKittak	DhirDhirKittak	ThaTirkittak

Figure 5.2 *Kaida in Teentaal*

The kaida in figure 5.2 is composed in teentaal and is comprised of two primary musical phrases. The first vibhag (the first four matras) of the composition is built upon the repeat of musical phrase highlighting the bols “Gi Da Na Ga.” Dhawale referred to this kaida as the “frog kaida” because of the movement of the hand playing the *tabla/dayan* when playing the bols “GiDaNaGa” at a fast tempo, which if performed correctly, resembles the jumping of a frog. The beginning of the phrase is articulated by the bol “Dha,” a bol made from a combination of the bols Tha and Ge – resonant strokes of the *tabla* and *bayan* respectively. Proceeding onwards is the bol, “GiDaNaGa” made from a combination of resonant strokes on the *bayan*, the lower in tessitura drum of the pair, and non-resonant strokes on the *tabla*. On the arrival of the consecutive three matras is the bol “dhit,” a combination stroke using a non-resonant stroke on the *tabla* and resonant stroke on the *bayan*, which are connected by the bol “GiDaNaGa.” Together, this string of bols helps produce the visual choreography that defines the aesthetic central to the frog kaida’s performance. In addition, I

was instructed that during the performance of this kaida, the resonant strokes produced on the bayan – Gi and Ga along within the bol Dhit – are to be played with extra emphasis to sound like the “ribbit” of a frog and add further to this kaida’s unique aesthetic.

The succeeding vibhag of the composition, “DhaKittakDhir DhirDhirKittak DhirDhirKittak ThaTirkittak,” is composed of musical material that is distinctly different from the previous vibhag, giving a stark contrast in musical aesthetic. The beginning of this new phrase is again articulated by the bol “Dha,” and is followed by a series of non-resonant strokes: “Kittak” and “DhirDhirKittak,” the latter being articulated by an initial resonant stroke of the bayan. The final matra of second vibhag is articulated with a resonant stroke of the tabla, “Tha,” followed by a string of non-resonant “Tirkittak” bols that lead into the khali portion of the kaida.<sup>68</sup>

Together, the structure and duration of these two phrases comprising the “frog” kaida accentuate the form and structure of the rhythmic cycle teentaal. The grouping of phrases that are four matras in duration mirrors the formal structure of teentaal, which is divided into four vibhags comprised of four matras. Additionally, the sounding of the bol “Dha” at the beginning of each vibhag of the kaida (matras one and five) parallels the bols sounding within the

---

<sup>68</sup> As a composition form, the phrases of the kaida follow the tali-khali structure of the respective rhythmic cycle in which it is set. Being so, each kaida will have a tali and khali version of itself. The third vibhag in figure 7 represents the khali version of the frog kaida, in which the aural presence of the bayan, the bol “ge,” is absent. The bols of the khali version reflect this change: “ThaSKiDaNaka ThitSKiDaNaKa ThitSKiDaNaKa.”

teentaal theka at those respective matras in the cycle (see figure 4), which further emphasizes these rhythmic subdivisions. Based on this analysis, it becomes evident that this kaida was composed with regard to the structural framework of the rhythmic cycle teentaal – a common practice found in tabla composition. Another kaida from my lessons with Dhawale reflects a similar compositional approach (figure 5.3).

<i>Tali:</i>	X	DhaSSDha	TiDhaGeNa	DhaTiDhaGe	DhiNaGeNa
	2	DhiNaSDha	TiDhaGeNa	DhaTiDhaGe	ThiNaKeNa
<i>Khali:</i>	0	ThaSSTha	TiThaKeNa	ThaTiThaKe	ThiNaKeNa
	3	DhiNaSDha	TiDhaGeNa	DhaTiDhaGe	DhiNaGeNa

Figure 5.3 *Kaida in Teentaal*

This kaida, a variation of a famous kaida attributed to the Dilli gharana, is composed of a primary musical phrase, “DhaSSDha TiDhaGeNa DhaTiDhaGe DhiNaGeNa,” which is comprised of a variety of resonant bols on both drums of the tabla. Following this phrase is a repeat of the bols in the first vibhag with an amendment to the musical content within the first matra, becoming “DhiNaSDha” instead of “DhaSSDha.” Much like the phrases of the “frog” kaida, the phrases comprising this kaida are four matras in length and bring out the structural form of the rhythmic cycle teentaal. The musical gaps (symbolized by the letter “S” in the notation) interrupt the musical cadence of the bol patterns and suggest an articulated point of arrival on matras one, five, nine, and thirteen – those matras at which the subdivisions of teentaal occur.

From my musical lessons and performances that I attended while in India, I observed the aforementioned compositional aesthetic recurrently. In contrast, many of the kaidas with which Rajesh Dhawale composes and performs reflect a dissimilar compositional approach. Instead of being composed with regard to the implicit rhythmic subdivisions of Hindustani rhythmic cycles, many kaidas distinct to the Mehboob Khansaheb contain musical phrases and patterns that emphasize subdivisions other than those implied by the divisions of the respective rhythmic cycle. Through the analysis of collected repertoire and a live solo performance, I will illustrate the particular compositional aesthetics that define the musical aesthetic of the Mehboob Khansaheb gharana.

### **The Mehboob Khansaheb Gharana of Tabla**

Rajesh Dhawale comes from a hereditary line of musicians who trace their musical heritage to the Farukhabad gharana, a school of tabla playing in the *purab baj*, or “eastern style” of the North Indian tabla. He began learning the tabla at an early age from his grandfather, Veeranna Kamkar, a famous tabla artist from the Hubli region of northern Karnataka. Dhawale later studied the tabla under Bhasavaraj Bhindigiri and Ustad Hidayat Khan, both being notable representatives of the Farukhabad gharana. However, Dhawale does not employ this socio-musical identify with which to identify him and his trade. Rather, his gharana distinction is attributed to Ustad Mehboob Khan Mirajkar, a famous tabla performer and pedagogue of the Farukhabad gharana who lived in Pune, Maharashtra during the late 19<sup>th</sup> and early 20<sup>th</sup> century. Bhasavaraj Bhindigiri,

who was also Dhawale's grandfather's guru, studied under Mehboob Khan in Pune and it is through this pedagogical connection that Dhawale affiliates himself to this lineage of tabla artists. Mehboob Khan studied under Ustad Alladiya Khan Amravatiwale of Hyderabad and Ustad Jahangir Khan of Indore and was renowned for his vast knowledge of rare compositions from the Punjab and Farukhabad gharanas.<sup>69</sup>

For over fifteen years Dhawale has maintained a career as a performer and pedagogue of the tabla within the South Indian city of Chennai (formerly known as Madras). In Chennai, Dhawale teaches a core of private students in his own home as well as within the curriculum at a private music academy. Apart from teaching Dhawale also accompanies local and visiting Hindustani musicians that concertize in Chennai, records musical tracks for the burgeoning "Kollywood" industry,<sup>70</sup> and is a high-grade artist employed at All India Radio (AIR). The following compositions that are analyzed I acquired during lessons with Dhawale while being a faculty member within the same institution of which he was also an instructor.

---

<sup>69</sup> Aban Mistry, *Pakhawaj & Tabla: History, Schools, and Traditions*, Mumbai: New Rajkamal Printing Press, 1984, p. 242. See also "Tabla Nawaz Ustad Shaik Dawood" <http://www.tablaustaddawood.com/biography.html>.

<sup>70</sup> "Kollywood" refers to the Tamil movie industry, which is primarily centered in Kodambakkam, a neighborhood located within the western suburbs of Chennai.

## Analysis of Pedagogic and Solo Repertoire

### *Kaida*

During our lessons, Dhawale paid special attention to identify the origin and technique of compositional forms he instructed to me. As mentioned above, the propensity of musical composition in tabla performance practice is to adhere to the structural divisions (vibhags) of a rhythmic cycle. The following two kaidas – compositions that I was informed were composed by Dhawale himself or were exemplary of the Mehboob Khansaheb gharana – do not adhere to such compositional principles. Rather, the musical patterns and phrases comprising these compositions disrupt the musical canter of their respective rhythmic frameworks as established by the theka.

The first kaida I will analyze is composed in teentaal. Rather than following the four + four + four + four divisions of teentaal, the musical patterns and fragments comprising this kaida stress alternate subdivisions of the rhythmic cycle. The matras have been color coded to show the different key phrases within the kaida (figure 5.4).

<i>Tali:</i>	X	DhaSSDha	TiDhaGeNa	DhaTiDhaGe	DhiNaDhaTi
	2	DhaGeNaDha	TiDhaGeNa	DhaTiDhaGe	ThiNaKeNa
<i>Khali:</i>	0	ThaSSTha	TiThaKeNa	ThaTiThaKe	DhiNaDhaTi
	3	DhaGeNaDha	TiDhaGeNa	DhaTiDhaGe	DhiNaGeNa

Figure 5.4 *Kaida* in *Teentaal*

The above kaida, in contrast to those analyzed in figures 5.2 and 5.3, emphasizes a rhythmic subdivision of three + three + two amongst the eight matras that comprise its total rhythmic duration. This initial phrase, indicated by the yellow-shaded boxes, begins similar to the kaida in figure 5.3, “DhaSSDha TiDhaGeNa DhaTiDhaGe,” but at the arrival of the fourth matra the phrase is interrupted by the bols “DhiNaDhaTi.” As part of my instruction, I was informed by Dhawale to accent the bol “Dhi” at the beginning of the fourth matra in order to clearly demarcate the articulation of a new musical idea. Following this metrical accent is a string of bols “DhiNaDhaTi DhaGeNaDha TiDhaGeNa” that comprises the second theme of this kaida, marked by the pink-shaded boxes. Like the first musical pattern, this phrase group is also three matra in rhythmic duration. Again I was instructed in my lessons to accent the bol occurring at the arrival of the seventh matra (the top left blue-shaded box in figure 5.4) to articulate and emphasize the beginning of a new musical body. The sounding of the bol “Dha” at the seventh matra begins the third phrase, “DhaTiDhaGe ThiNaKeNa,” which is identified by the blue-shaded boxes and concludes the body of the kaida. The bols “ThiNaKeNa” are distinct for their inclusion of non-resonant strokes of the bayan, which serves to bridge the tali and khali portions of the kaida.

With the particular manner in which the musical patterns of this kaida are arranged, the rhythmic canter established by the structure and theka of teentaal is noticeably interrupted. The added metric accents in these phrases further obfuscate the demarcation of this rhythmic structure as well. Together,

these compositional approaches produce an aurally distinct aesthetic that departs from the musical expectations established by the structure of teentaal and its theka. This compositional approach appears again in a kaida composed in jhaptaal:

<i>Tali:</i>	DhaTeTeDha	TeTeDhaDha	TeTeDhaGe	DhiNaGeNa	TeTeTeTe
	X		2		
	DhaDhaTeTe	DhaGeDhiNa	GeNaDhaDha	TeTeDhaGe	ThiNaKeNa
	0		3		
<i>Khali:</i>	ThaTeTeTha	TeTeThaTha	TeTeThaKe	ThiNaKeNa	TeTeTeTe
	X		2		
	DhaDhaTeTe	DhaGeDhiNa	GeNaDhaDha	TeTeDhaGe	DhiNaGeNa
	0		3		

Figure 5.5 *Kaida in Jhaptaal*

The musical content of the above kaida, like the previous example, does not cogently align to the vibhags of jhaptaal, which is divided two + three + two + three. Rather, the musical phrases comprising this kaida stress a subdivision of four + three and one half + two and one half matras, totaling ten matras, or one full cycle of jhaptaal. The first four matras comprise the first initial musical phrase “DhaTeTeDha TeTeDhaDha TeTeDhaGe DhiNaGeNa,” a complex passage employing a variety of resonant and non-resonant tabla bols identified by the

yellow-shaded boxes.<sup>71</sup> The subsequent rhythmic fragment, shown by the pink-shaded boxes, begins with a string of non-resonant strokes of the tabla “TeTeTeTe,” and continues with a fragment from the initial phrase “DhaDhaTeTe DhaGeDhiNa GeNa.” The audible contrast of the non-resonant strokes “TeTeTeTe” helps articulate the initiation for this new musical pattern, which is three and one-half matra in rhythmic value. Concluding the remainder of the kaida is a third musical pattern (blue-shaded boxes) worth two and one-half matras in duration and consisting of another fragment taken from the initial phrase. In this iteration the bols are modified to anticipate the arrival of the khali portion of the kaida’s performance: “DhaDha TeTeDhaGe ThiNaKeNa.” The double articulation of the bol “Dha” in the second half of the fourth vibhag (the top left blue-shaded box in figure 5.5) helps re-articulate this as a new musical fragment. Together, these three musical phrases constitute ten matras: one complete cycle of jhaptaal. In a similar fashion to the musical example in figure 5.4, the emphasis on subdivisions divergent from the established rhythmic cycle in this kaida interrupts the rhythmic canter of jhaptaal’s two + three + two + three framework, providing for a rhythmically interesting reorganization musical space.

The articulation of musical phrases not following the vibhags of teentaal and jhaptaal, as shown in the kaidas in figures 5.4 and 5.5 respectively, provides for a distinctive musical aesthetic for the Mehboob Khansaheb gharana. When

---

<sup>71</sup> Readers familiar with tabla performance practice will recognize this four-matra pattern as a famous Dilli-style kaida composed in teentaal by Natthu Khan (1875-1940) of the Dilli gharana.

juxtaposed to their implied rhythmic framework, these musical phrases and fragments provide for rhythmic variety and a departure from the musical expectations established by each rhythmic cycle's form and theka. Concerning the composition of theme-and-variation repertoire such as the kaida, the previous described conventions represent a unique characteristic that emphasizes the individuality of the Mehboob Khansaheb gharana. In contrast, the fixed compositional forms of this gharana analyzed in the following section contain a different compositional approach regarding their music material, focusing instead on the manipulation of rhythmic subdivision within the context of a rhythmic cycle.

### *Gat*

Much like musical content of the kaida, the fixed compositional forms of tabla performance practice are composed of a thematic body and a cadential musical form, most often a tihai or variation of a tihai. Robert Gottlieb notes that the fixed compositions of the Farukhabad gharana (and its affiliated paramparas) are largely terpsichorean, stemming from the heavy presence of Kathak dance in the courts associated with the purab baj tabla gharanas – Lucknow and Farukhabad. Many compositions of these gharanas were influenced or taken from *parhans*, mimetic dance forms that were accompanied originally by the pakhawaj, and therefore employ a diversity of musical material and rhythmic variation. In particular, Gottlieb notes that the compositions of the Farukhabad gharana are typically distinguished by the presence of phrases in

several different *laya*; *laya* referring to the number of divisions that can be applied to one *matra*. Compositions of the Farukhabad gharana commonly contain musical material including two, three, or four different *layas*, which are known as *dupalli*, *tipalli*, and *chaupalli* compositions respectively.<sup>72</sup>

Since the Mehboob Khansaheb gharana falls within the greater scope of the Farukhabad gharana, it is not a surprise that many of the fixed compositional forms I was given by Dhawale in our lessons emphasize a diversity of different *laya* within their frameworks. A *tipalli gat* composed in *teentaal* illustrates the presence of three different *laya* within the context of one composition:

X	DhaGeTeRe	KeTaDhiNa	GeDaNaKa	TakSKranS
2	DhaGeTeReKeTa	DhiNaGeDaNaKa	TakSKranSDhaGe	TeReKeDhiNa
0	GeDaNaKaTakS	KranSDhaGeTeRe	KeTaDhiNaGeDa	NaKaTakSKranS
3	DhaTirkittak	DhaS	DhitSKran	DhaTirkittak
	DhitKran	DhaTirkittak	Dha	DhitKran
X	Dha			

Figure 5.6 *Tipalli Gat* in *Teentaal*

This composition is comprised of an initial theme “Dha Ge Te Re Ke Ta Dhi Na Ge Da Na Ka Tak Kran” that is subsequently set in two different *laya* and concludes with a *tihai*. The initial theme (identified by the yellow-shaded boxes)

<sup>72</sup> Gottlieb, *North Indian Tabla Drumming*, p. 76.

is set in *chaugun laya*, in which one matra is divided into four equal subdivisions, and covers the duration of one complete vibhag of the rhythmic cycle. Following this is a pattern using the same bols of the initial theme placed in *chhegun laya* (identified by the pink-shaded boxes), in which there are six equal subdivisions per matra. This musical pattern in *chhegun laya* is played three times and is rhythmically equal to two complete vibhags. Concluding the composition is a *tihai* (indicated by the blue-shaded boxes) built upon the bols “Dha Tirkittak Dhit Kran Dha.” This bol pattern is set in *athgun laya*, in which there are eight equal subdivisions per matra, and the phrase is performed three times. Upon the third iteration of the phrase the concluding bol of the *tihai*, “Dha,” arrives on the *sam*.

Another *dupalli gat* composed in *teentaal* contains a similar musical pattern that is set in different *laya* within the span of a single composition.

X	DhaGeTeRe	KeTaDhiNa	GeDaNaKa	TakSKranS
2	DhaGeTeRe	GeDaNaKa	DhaTirkitttak	NaTirkittak
	KeTaDhiNa	TakSKranS	NaTirkittak	TakKran
0	DhaSSDhiS	Dha	NaTirkittak	TakKran
	GeSNa	DhaTirkittak	NaTirkittak	DhaSSDhi
3	SGeSNa	DhaTirkitttak	NaTirkittak	DhaSSDhiS
	Dha	NaTirkittak	TakKran	GeSNa
X	Dha			

Figure 5.7 *Dupalli Gat* in *Teentaal*

The gat in figure 5.7 uses the same musical material as the previous example, but sets the primary musical phrase of the composition in chaugun and athgun laya respectively. Beginning this composition is the pattern “Dha Ge Te Re Ke Ta Dhi Na Ge Da Na Ka Tak Kran,” which is set in chaugun laya (identified by the yellow-shaded boxes). Immediately following this and identified by the blue-shaded boxes is the same theme whose bols have been set in athgun laya, decreasing the rhythmic value of each individual bol by half than those in the previous pattern. Concluding the remainder of the gat is a tihai built upon the phrase “DhaTirkittak NaTirkittak NaTirkittak Tak Kran Dha Dhi Ge Na Dha,” a similar pattern as the tihai in figure 5.6 but with an additional and highly syncopated extension, “Dhi Ge Na Dha.” This pattern comprising the tihai is similarly set in athgun laya and is marked by the orange-shaded boxes. As in previous examples, the ultimate bol of the third iteration of this pattern, “Dha,” coincides with the arrival of the sam.

### *Chakradar*

Much like the gat, the musical material comprising a chakradar consists of a body of thematic material concluded with a tihai. As illustrated in figures 5.4 and 5.5, the fixed compositional forms from the Mehboob Khansaheb gharana feature prominently the presence of numerous laya within the context of a composition – an indicator of this tradition’s relationship to the Farukhabad gharana. The following *tipalli chakradar* contains a similar compositional

approach and in many ways combines the rhythmic transformations illustrated in the previous two musical examples into one compositional form.

X [	DhaGeTeRe	KeTaDhiNa	GeDaNaKa	TakSKranS
2	DhaGeTeReKeTa	DhiNaGeDaNaKa	TakSKranSDhaGe	TeReKeDhiNa
0	GeDaNaKaTakS	KranSDhaGeTeRe	KeTaDhiNaGeDa	NaKaTakSKranS
3	DhaGeTeRe	GeDaNaKa	DhaTirkittak	NaTirkittak
	KeTaDhiNa	TakSKranS	NaTirkittak	TakKran
X	Dha	NaTirkittak	TakKran	DhaTirkittak
	DhaTirkittak	NaTirkittak	Dha	NaTirkittak
2	NaTirkittak	Dha	] X 3	
	TakKran			

Figure 5.8 *Tipalli Chakradar* in *Teentaal*

The tipalli chakradar in figure 5.8 starts with the same patterns of bols as the tipalli gat in figure 5.6, “Dha Ge Te Re Ke Ta Dhi Na Ge Da Na Ka Tak Kran,” and places it within three different laya within the musical body of this composition. The composition begins by setting the primary pattern of bols in chaugun laya (marked by the yellow boxes). Proceeding onwards, this same musical pattern is then placed in chhegun laya (marked by the pink boxes). This pattern is played three times in chhegun laya before proceeding to the final variation of the phrase, which is set in athgun laya (marked by the light blue boxes). Concluding the body of this composition is a tihai composed of the bols

“Dha Tirkittak Na Tirkittak Na Tirkittak Tak Kran Dha.” The entire body of musical material is then played three times, with the final bol of the ultimate repetition arriving on the sam.

### **Analyses of Live Performance**

An analysis of a recorded solo performance of Rajesh Dhawale from the spring of 2010 emphasizes my previous arguments regarding the musical repertoire from the Mehboob Khansaheb gharana. This solo, set in jhaptaal, begins in *vilambit laya* (slow tempo) and gradually progresses to *drut laya* (fast tempo). During his solo, Dhawale plays many theme-and-variation as well as fixed compositional forms, highlighting the gat repertoire in particular.

*Uthan*            A 1-2.            These avarta are elaborations of the jhaptaal theka.  
                          A 3-6.            The solo begins with four introductory *mohras* (lit. “the front”), phrases that are played three times with the final bol of the last repetition arriving on the sam.

                          A 7-10.            This *uthan* (lit. “lifting up”) is set in athgun laya and is primarily composed of fast non-resonant bols connected by interjections of sonorant bols. Concluding this composition is a tihai in A 10.

*Peshkar*            A 12-29.            Dhawale begins by vocally reciting this composition, a common practice by contemporary tabla artists within the context of a

performance. This *peshkar* (lit. “to commence”) begins in chaugun laya and shifts to athgun laya by A 24.

*Kaida*            A 35-54.        Before playing this composition, Dhawale acknowledges this kaida as being a purab-style composition. In addition, he informs the audience of the distinct rhythmic grouping involved in this kaida’s composition and performance. The compositional grouping of this kaida emphasizes a rhythmic structuring of three + two matras, a reversal of the standard jhaptaal vibhags. The *paltas*, improvisatory forms built from the musical material of the kaida, also stress alternate subdivision of three and one-half + one and one-half. This provides for a distinct rhythmic contrast against the two + three + two +three framework implied by the jhaptaal theka. This compositional approach parallels the kaidas in figures 5.4 and 5.5, which are also grouped to emphasize different subdivisions of the rhythmic cycle. The conclusion of this kaida in A 53 marks the end of the vilambit section of the solo.

*Gat*                A 57-62.        This gat begins the opening of the *drut* portion of the tabla solo. Before each composition performed in the drut section, Dhawale vocally recites each composition before its performance. This gat, and many of those that follow, highlight the bol “DhirDhirKittak TakitDha.” In addition, this gat contains a distinct tihai “DhirDhirKat DhaGe GeGe Dha” that highlights the melodic inflections of the bayan.

*Gat* A 65-69. This musical material of this gat reflects that of the previous gat, but within its thematic body and tihai contains the pattern “TeTeKaTa GaDiGeNa Dha,” a string of bols adapted to the tabla from *pakhawaj* performance practice.

*Chakradar* A 76-96. This chakradar is a tipalli composition that contains musical fragments set in three different laya (figure 5.9).

[	DhaSNa	DhiKiTa	DhaTreKe	DhiKiTa	TaKiTa	
	X		2			
	DhaTreKe	DhiKiTa	Na	KatSTeTe	GeGeTeTe	
	0		3			
	DhaTrekeDhi	KiTaGeNa	DhaTirkittak	NaTirkittak	NaTirkittak	
	X		2			
	TakKran	Dha	DhaTirkittak	NaTirkittak	NaTirkittak	
	0		3			
	TakKran	Dha	DhaTirkittak	NaTirkittak	NaTirkittak	
	X		2			
	TakKran	Dha	] X 3			
	0					

Figure 5.9 *Tipalli Chakradar* in *Jhaptaal*

This composition starts in *tigun laya*, in which each matra is subdivided into three equal portions (marked by the yellow-shaded boxes). Following this initial theme as another musical phrase, identified by the pink-shaded boxes, that is set in *chaugun laya*, or four equal subdivisions per matra. Concluding the musical body of the *chakradar* is a *tihai*, indicated by the blue-shaded boxes, that is built upon the phrase “DhaTirkittak NaTirkittak NaTirkittak TakKran Dha” and is set in *athgun laya*. As a whole, this entire musical body is performed three times, with the final bol of the final repetition coinciding with the sam.

*Chakradar* A 100-117. This *chakradar* has a unique musical aesthetic that is provided by the bol “Dhe,” which appears within the body of thematic musical material and *tihai* that comprise this *chakradar*. The resonant bols “TaSKiTa TaKaDhiS SSTaKa DhiNaGeNa Dha” in the thematic body of this composition also provide for a contrasting variety of musical sonorities.

*Tipalli Gat* A 123-144. This *gat* is a unique compositional form whose musical content can be performed verbatim in three different *laya*: *tigun* (avartas 136-139), *chaugun* (avartas 140-142), and *chhegun* (avartas 143-144). Of particular mention with this *gat* is the bol “NaGeNa NaGeNa NaGeTe ReKeTa,” which is taken from the tradition of the *naqqara*, a pair of hemispherical-shaped drums from North India played by sticks, and is played on the *tabla* with both hands.

*Gat*            A 148-152.    This gat is similar to the composition performed at A 65 and highlights the bol “DhirDhir.” Opening the composition is the same pattern of bols in the earlier gat, “DhirDhirKittak TakitDha.” Concluding the musical form is a tihai comprised of similar musical content.

*Laykari*        A 162-184.    In laykari, “rhythmic play,” a tabla artist will apply and emphasize a different subdivision than the original metric framework. During this musical interlude, Dhawale applies a division of four beats to the metric framework of jhaptaal, which in drut laya is typically felt in five matras. Beginning in avarta 168, Dhawale performs a commonly heard *bhajan* – Hindu devotional song – theka. At avarta 175, Dhawale continues to emphasize the subdivision of four and additionally applies bol patterns that are set in *panchgun laya*, in which the beat is subdivided into five equal portions.

*Chalan*        A 187-203    A *chalan*, (lit. “moving”) is a theme-and-variation compositional form that is comprised of a continuous, rapid string of bols. Dhawale performs and improvises on a chalan composed of the bols “DhaTiGeNa DhiNaGeNa” in A 187-190. Immediately following this chalan is a transition to another bol pattern “DhaTirgidnag DhinTirgidnag,” which sets up the final tihai of the performance in avartas 201-202.

## **Chapter 6**

### **The Karnatik Tabla**

In this chapter I analyze the tabla tradition propagated by N. Sundar, my primary tabla teacher for more than seven years. Because of the unique socio-musical milieu in which he has forged his career as a musician, the tradition of tabla that he has to come to propagate combines compositional approaches to Hindustani and Karnatik music within the same musical idiom. The result is a unique fusion of musical concepts that combines an elaborate system of thematic development inherent within Karnatik percussion music with the polyrhythmic and ambidextrous nature of tabla performance practice. Through an analysis of collected repertoire and a live performance, I will elucidate the innovative compositional approaches incorporated within the tabla tradition of Sundar Nagarajan that distinguish it from traditional tabla repertory. Before I present these analyses, a brief discussion of a few rhythmic concepts paramount to Karnatik music composition is necessary.

#### **Concepts of Karnatik Composition**

Central to the composition process in Karnatik music are the six *yatis*, which deal with the arrangement of rhythmic and melodic patterns in various ways. Through the expansion and diminution of musical phrases, use of the *yatis* within musical composition give rise to a series of embedded sound-images, which appear in the context of their performance and written form. Trichy Shankaran, a legendary virtuoso of mridangam, asserts that *yati* “is a concept of

rhythmic design based on geometric shape that can be applied to various aspects of music such as *sahityam* (song text), *svara* patterns, drum patterns, the sequences of tempi, *angas* (cycles of *talam*) in a *tala avartam*, dance choreography, etc.”<sup>73</sup> The six *yatis* are:

(1) *Gopuccha yati* (lit. “cow’s tail) is a rhythmic or melodic pattern in which each successive permutation of the original phrase becomes shorter. Much like its name, the sound-image created by *gopuccha yati* resembles the manner in which the tuft of hair at the tail of a cow starts wide at its base and tapers to its end (see figure 6.1a).

(2) *Srotogata yati* (lit. “stream becoming river” or “moving like a current”) is a rhythmic or melodic pattern in which each successive permutation of the original phrase becomes longer. The sound-image created by *srotogata yati* is inverse to that of *gopuccha yati*, starting narrow and extending outwards as the original phrase is expanded (see figure 6.1b).

(3) *Mrdanga yati* is a rhythmic or melodic pattern in which a phrase is expanded and subsequently diminished to create a sound image resembling that of the *mridangam* (see figure 6.1c).

(4) *Damaru yati* is a rhythmic or melodic pattern in which a phrase is diminished and subsequently expanded to that of its original. The sound-image created by *damaru yati* resembles the *damaru*, an hourglass shaped drum sacred to Lord Shiva (see figure 6.1d).

(5) *Sama yati*, also known as *Pipilika yati* (“ant row”) is a rhythmic or melodic pattern in which no alteration is made to the original phrase (see figure 6.1e).

and (6) *Vishama yati* is a rhythmic or melodic pattern that does not adhere to any discernable organization scheme (see figure 6.1f).

By using an example rhythmic phrase “Tha Di Ki Ta Tom,” in which each syllable is a mnemonic device that represents a specified drum stroke on the

---

<sup>73</sup> Trichy Sankaran, *The Rhythmic Principles and Practice of South Indian Drumming*, Toronto: Lalith Publishers, 1994, p. 29.

mridangam, the six yatis can be illustrated by the following six notational diagrams:

- |  |   |   |
|--|---|---|
| <p>(a) Tha Di Ki Ta Tom<br/>Di Ki Ta Tom<br/>Ki Ta Tom<br/>Ta Tom<br/>Tom</p>  | <p>(b) Tom<br/>Ta Tom<br/>Ki Ta Tom<br/>Di Ki Ta Tom<br/>Tha Di Ki Ta Tom</p>                                   | <p>(c) Tom<br/>Ta Tom<br/>Ki Ta Tom<br/>Di Ki Ta Tom<br/>Tha Di Ki Ta Tom<br/>Di Ki Ta Tom<br/>Ki Ta Tom<br/>Ta Tom<br/>Tom</p> |
| <p>(d) Tha Di Ki Ta Tom<br/>Di Ki Ta Tom<br/>Ki Ta Tom<br/>Ta Tom<br/>Tom<br/>Ta Tom<br/>Ki Ta Tom<br/>Di Ki Ta Tom<br/>Tha Di Ki Ta Tom</p> | <p>(e) Tha Di Ki Ta Tom<br/>Tha Di Ki Ta Tom<br/>Tha Di Ki Ta Tom<br/>Tha Di Ki Ta Tom<br/>Tha Di Ki Ta Tom</p> | <p>(f) Di Na Di Na Tom<br/>Ta Ka Tom<br/>Tom Tha<br/>Ta Ka Di Na<br/>Di Na<br/>Tom</p>  |

Figure 6.1a-f *Gopuccha yati*, *srotogata yati*, *mrdanga yati*, *damaru yat*, *sama yati*, and *vishama yati*.

Although it is not the primary custom regarding the dissemination of Karnatik music, many professional and amateur artists alike have in some fashion employed the use of written notation. With regards to the notation diagrams above and all subsequent Karnatik musical notations in this thesis that are written in a vertical fashion to show the sound-images of yati, they are read from left to right and top to bottom. The continuation of musical material in succeeding lines within the notation does not indicate a gap or break in performance continuity, but rather the break indicates a subsequent elaboration of an established phrase or pattern. Rhythmic values for rhythmic syllables,

known in Karnatik music as *solkattu*, are designated by individual subscript numbers; syllables with no subscript numbers are understood as being worth one unit in value in relation to a metered pulse, or *akshara* (ie. the phrase “Tha Di Ki Ta Tom<sub>2</sub>,” in which the syllables “Tha,” “Di,” “Ki,” and “Ta” are worth one unit in value while “Tom<sub>2</sub>” is two units in value). Notations such as those in Figures 6.1a-f, when performed in continuity, adhere to a rhythmic structure known in Karnatik music as *tala*, a repetitive rhythmic structure that is divided into various *angas*, component divisions, that are expressed by series of claps and waves of the hand (known as *drutam*) or clapping and counting with individual fingers (*laghu*).<sup>74</sup>

In the musical examples in this thesis, the hand claps and waves of *drutam* *angas* are expressed with Xs and Os respectively, while in *laghu* claps of the hand are similarly expressed with Xs while finger counts are expressed in ascending numerical order, which in practice starts with the pinky finger and counts towards the thumb. The organization of these rhythmic principles can be understood clearer in a diagram showing the divisions (*angas*) and *aksharas* of *Adi Tala*, an eight-beat rhythmic cycle used prominently in contemporary Karnatik performance practice (Figure 6.2).

---

<sup>74</sup> Another type of *anga*, *anudrutam*, is less common and worth only one *akshara*, which is expressed by a single clap of the hand.

Angas:	Laghu				Drutam		Drutam	
Aksharas:	1	2	3	4	5	6	7	8
Notation:	X	2	3	4	X	0	X	0
Counted:	Clap	Pinky	Ring	Middle	Clap	Wave	Clap	Wave

Figure 6.2 *Adi Tala*.

Adi tala is composed of eight beats, which are divided four, two, and two. One complete cycle of tala is known as avarta. The first four beats are expressed by laghu, while the remaining two divisions are drutam. The laghu begins with an initial clap on the *sam*, downbeat, with subsequent beats counted on the pinky, ring, and middle fingers. Finishing the remaining four beats are two drutam sections comprised of a clap and wave of the hand each. Throughout the remainder of this chapter my musical analysis will include musical examples that elicit the aforementioned yatis. In order to express the sound-image inherent in yati patterns I will express musical notations in both a vertical fashion (as in figures 6.1a-f) as well as in relation to the respective rhythmic cycle in which compositions are composed or performed.

### **The Use of Yatis in Percussion Repertoire**

Within the context of a composition, the principles of yati are used for the elaboration and diminution of a specific body of thematic musical material, which may or may not constitute the entire composition itself. In addition, a composition may also contain cadential musical phrases that are unrelated to the musical material contained within the primary body of thematic material. These cadential musical phrases are similarly composed with regard to the

principles of yati (most commonly Sama yati). A *korvai*, a rhythmic musical form common in Karnatik percussion performance practice, illustrates the use of yati principles in a three-fold manner (see Figure 6.3).

Theme 1:	Tha <sub>2</sub> Di <sub>2</sub> Ta Ka Di Na Dhom <sub>2</sub> Di <sub>2</sub> Ta Ka Di Na Dhom <sub>2</sub> Ta Ka Di Na Dhom <sub>2</sub>
Theme 2:	Tha <sub>3</sub> Di <sub>3</sub> Ki <sub>3</sub> Ta <sub>3</sub> Thom <sub>3</sub> Tha <sub>2</sub> Di <sub>2</sub> Ki <sub>2</sub> Ta <sub>2</sub> Thom <sub>2</sub>
Mora:	Tha Di Ki Ta Thom Tha Di Ki Ta Thom Tha Di Ki Ta Thom   Dhom

Figure 6.3 *Korvai* in *Adi Tala*

This *korvai* is comprised of two primary musical themes that undergo various diminutions and/or repetitions: the first theme, “Tha<sub>2</sub> Di<sub>2</sub> Ta Ka Di Na Dhom<sub>2</sub>” and the second “Tha Di Ki Ta Tom.” Included within the body of theme two is a *mora*, a cadential phrase that is repeated thrice with the final note of the last repetition ending on the sam (in this example being articulated by the note “Dhom” to the right of the final repetition). The development of theme one centers around the diminution of the initial sounding phrase with two subsequent permutations that together outline the sound-image of *gopuccha yati* – the narrowing of the “cow’s tail.” After the iteration of the beginning theme, a variation follows it in which the first note of the theme and its value – Tha<sub>2</sub> – are eliminated. Thus, the first permutation of the phrase becomes “Di<sub>2</sub> Ta Ka Di Na Dhom<sub>2</sub>. The second variation follows a similar diminution, eliminating

the initial note in the previous line of musical material –Di<sub>2</sub> –and leaving the fragment “Ta Ka Di Na Dhom<sub>2</sub>” as the third and final permutation of the first body of thematic musical material in the korvai. When aligned vertically this diminution of musical material produces the sound-image associated with gopuccha yati (figure 6.1a).

The second thematic material group in the korvai in figure 6.3 also evokes the sound-image of gopuccha yati through the diminution of a rhythmic pattern. In contrast to the use of gopuccha yati in theme one of the korvai, the use of gopuccha yati within the second theme is with regard to the diminution of rhythmic values assigned to patterns of identical notes. The beginning pattern of theme two starts with the phrase “Tha<sub>3</sub> Di<sub>3</sub> Ki<sub>3</sub> Ta<sub>3</sub> Thom<sub>3</sub>,” with each note being worth three units as indicated by the attached subscript numbers. Following this initial pattern is a permutation involving the same notes, but with a decrease in the assigned rhythmic values for each note from three to two. Thus, the pattern for the first permutation in theme two is “Tha<sub>2</sub> Di<sub>2</sub> Ki<sub>2</sub> Ta<sub>2</sub> Thom<sub>2</sub>.” In the final permutation, which is repeated three times to form a cadential mora, the notes from the previous two phrases are maintained while their rhythmic values are further decreased from two to one unit. Adapting the notation to show visually the durational value of notes better illustrates the sound-image created by such rhythmic diminution (see figure 6.4).

Tha <sub>3</sub>	Di <sub>3</sub>	Ki <sub>3</sub>	Ta <sub>3</sub>	Thom <sub>3</sub>
Tha <sub>2</sub>	Di <sub>2</sub>	Ki <sub>2</sub>	Ta <sub>2</sub>	Thom <sub>2</sub>
Tha	Di	Ki	Ta	Thom
Tha	Di	Ki	Ta	Thom
Tha	Di	Ki	Ta	Thom

Figure 6.4 *Gopuccha yati* in Theme 2 of *korvai*

In figure 6.4 the rhythmic durations of the notes in theme two of the *korvai* are represented by the differing lengths of boxes in which the notes appear. The notes of the initial iteration of theme two, whose rhythmic values are expressed by the subscript three in the original notation, are contained within the largest boxes on the top. Following this phrase is a repeat of identical notes that have undergone a rhythmic reduction from three and two units respectively. The notes of this permutation are thus contained within narrower boxes than those of the beginning phrase to show this relationship. Finally, the final variation of the beginning pattern in theme two contains notes whose rhythmic values have been further diminished to one unit and are contained within the smallest boxes at the bottom. The notes of the third permutation of theme two complete the rhythmic diminution the body of thematic material and are also the notes upon which the concluding mora is built. These notes, “Tha Di Ki Ta Thom” are repeated three times identical, an aesthetic of *sama yati* or the “ants row” in which all notes of a phrase are repeated without elaboration. The *korvai* concludes with a final note, “Dhom,” which is played after the final

repetition in the mora. When placed against the structure of *Adi Tala*, the sound-images of the employed *yatis* become obfuscated and the *korvai* appears as thus:

A1		A2	
X	Tha <sub>2</sub> Di <sub>2</sub>	X	(Ki <sub>1</sub> )Ta <sub>3</sub>
2	TaKaDiNa	2	Dhom <sub>3</sub> Tha <sub>2</sub>
3	Dhom <sub>2</sub> Di <sub>2</sub>	3	(Tha <sub>1</sub> )Di <sub>2</sub> Ki <sub>2</sub>
4	TaKaDiNa	4	(Ki <sub>1</sub> )Ta <sub>2</sub> Thom <sub>2</sub>
X	Dhom <sub>2</sub> TaKa	X	(Thom <sub>1</sub> )TaDiKi
0	DiNaDhom <sub>2</sub>	0	TaThomThaDi
X	Tha <sub>3</sub> Di <sub>3</sub>	X	KiTaThomTha
0	(Di <sub>2</sub> )Ki <sub>3</sub>	0	DiKiTaThom
		X	Dhom

Figure 6.5 *Korvai* in *Adi Tala*<sup>75</sup>

### The Karnatik Tabla

Nagarajan Sundar is a performing musician and pedagogue who specializes in Hindustani and Karnatik percussion traditions. He is the son of the famous mridangam artist Sri S. Nagarajan, and his gurus include Sri A. S. Krishnan for morsing and Sri. I. Sathyanathan on the tabla. For over fifteen years N. Sundar has taught private lessons in morsing, mridangam, and tabla performance practices to students of all ages and has enjoyed a prosperous career as a studio and concert musician in Chennai. His primary musical engagements are with various musical ensembles in South India, such as those discussed in the previous chapters of this thesis, and he manages his own

---

<sup>75</sup> In this composition many note values extend over the demarcating lines forming the structure of *Adi Tala*. In such instances, the notes and their remaining values that extend over the *angas* (divisions) have been placed within parenthesis and are to be understood as part of the decay of the original note's articulation. A1 stands for *avartanam* 1 and A2 for *avarta* two.

ensemble named *Sangamam*, meaning “coming together” in the Tamil language, which performs in public and private musical venues for sacred and secular occasions.



Figure 6.6 South Indian percussion ensemble “Vibrations” concert, San Jose, California. N. Sundar is seated on the far right. Photo taken by author, 2011.

As a frequent performer in Karnatik percussion ensembles Sundar often fluctuates between performing on the morsing and tabla – instruments on which he performs a variety of pre-composed and improvised musical material. While it is common for artists in the context such ensembles to develop and improvise upon musical material established by a leading player in the course of a performance, artists similarly perform and develop their own musical repertoire and patterns. Sundar has accordingly been able to develop a unique repertoire of original tabla compositions and phrase patterns, *bols*, that are constructed with regard to the compositional principles of Karnatik music yet exist within the

idiomatic language and performance practice of the Hindustani tabla; an innovative tradition that I have come to term the “Karnatik Tabla.”

In addition to performing these syncretic musical forms within the context of Karnatik percussion ensembles, Sundar also incorporates musical repertoire composed with regard to the principles of yati into his musical lessons. During my lessons I was given a variety of traditional tabla repertoire – kaidas, relas, gats, and chakradars – in various Hindustani taals. Apart from these lessons, I was also given original repertoire composed by Sundar himself that employed the use of various yatis. The following musical analyses examine original compositions by Sundar that exude the musical aesthetics of various forms of yati and define the distinct musical aesthetic of this innovative musical tradition.

### **Analysis of Pedagogic and Solo Repertoire**

#### *Kaida*

The musical repertoire that comprised my tutelage under Sundar Nagarajan is comprised of a variety of theme-and-variation and fixed compositional forms. The primary musical form that served as a basis for my lessons was the kaida. A kaida composed in the rhythmic cycle teental serves a prime example of a Hindustani musical form that has been composed with regard to the yati principles of Karnatik music (Figure 6.7).

<i>Thali:</i>	X	DhaTeTeDha	TeTeDhaDha	TeTeDhaDha	TeTeDhaDha
	2	DhaTeTeDha	DhaDhaTeTe	DhaTiDhaGe	ThiNaKeNa
<i>Kali:</i>	0	ThaTeTeTha	TeTeThaTha	TeTeThaTha	TeTeDhaDha
	3	DhaTeTeDha	DhaDhaTeTe	DhiTiDhaGe	DhiNaGeNa

Figure 6.7 *Kaida* in *Teental*.

The kaida is composed in the rhythmic cycle teental and is a variation on the famous Dilli kaida of Natthu Khan and is composed of the same two fundamental strokes of the tabla: Dha and Te. When expressed in reference to the structure of tala, the development of musical material is obfuscated by the division of the metric cycle in which it is set (Figure 5.1). However, when the kaida is oriented in relation to its thematic development the systematic elaboration of phrase material becomes more apparent and evokes the sound-image of srotogata yati (Figure 6.1b).

<i>Thali:</i>	<i>Kali:</i>
Dha Te Te	Tha Te Te
Dha Te Te	Tha Te Te
Dha Dha Te Te	Tha Tha Te Te
Dha Dha Te Te	Tha Tha Te Te
Dha Dha Dha Te Te	Dha Dha Dha Te Te
Dha Dha Dha Te Te	Dha Dha Dha Te Te
Dha Ti Dha Ge Thi Na Ke Na	Dha Ti Dha Ge Dhi Na Ge Na

Figure 6.8 *Srotogata Yati* in *Kaida* in *Teental*.

From a compositional standpoint, this kaida features an established theme, the “Dha Te Te” that also constituted the first phrase of the original Dilli kaida, and contains two subsequent permutations with each variation, including the original, being played twice. From the original phrase, the second

permutation adds an additional “Dha” stroke to that of the original content, expanding it from “Dha Te Te” to “Dha Dha Te Te.” In the final variation, an additional “Dha” stroke is added to the previous permutation to give a final extended phrase of “Dha Dha Dha Te Te.” The final lines of musical material, “Dha Ti Dha Ge Thi Na Ke Na” and “Dha Ti Dha Ge Dhi Na Ge Na” are unrelated in thematic material but serve as transitional musical material with which to segue to subsequent repetitions or variations of musical material relevant to the performance of the kaida.

### *Gat*

The gat, perhaps more so than the other forms of tabla repertoire, is the most accessible compositional form for the incorporation of yati principles. As discussed in the previous chapter, a gat (“composition”) includes a body of thematic musical material, which concludes with a cadential tihai. The following two compositions each contain a body of thematic material, whose systematic elaboration creates a sound-image of a specific yati, and a tihai, which evokes the sound-images of a different yati.

One gat that I received during my tutelage exhibits the compositional aesthetics that produce the sound-images of srotogata yati and sama yati (Figure 6.9).

Dha Dha<sub>2</sub>  
 Dha Dha Dha<sub>2</sub>  
 Dha Dha Dha Dha<sub>2</sub>  
 Dha Dha Dha Dha Dha<sub>2</sub>  
 Dha Dha Dha Dha Dha Dha<sub>2</sub>  
 Dha Dha Dha Dha Dha Dha Dha<sub>2</sub>  
 Dha Dha Dha Dha Dha Dha Dha Dha<sub>2</sub>

Tihai:        Dha Dha TTKTG DGN Dha<sub>2</sub>  
                  Dha Dha TTKTG DGN Dha<sub>2</sub>  
                  Dha Dha TTKTG DGN | Dha

Figure 6.9 *Gat* in *Teental*.

The compositional process producing the sound-image of srotogata yati in this gat is the elaboration of a musical pattern leading up to a specified bol, Dha<sub>2</sub>, which is distinguished by a contrast in rhythmic duration and serves as an arrival point for the preceding musical material. The original pattern, “Dha Dha<sub>2</sub>,” cycles through six subsequent permutations before concluding with a tihai, a cadential pattern created through the triple repetition of a single musical phrase or pattern separated by equal gaps. The musical material of the tihai is repeated three times identically and therefore creates the sound-image of sama yati.<sup>76</sup>

The initial permutation of the thematic musical material in this gat begins with a single bol “Dha” preceding the arrival of the stroke of greater rhythmic duration “Dha<sub>2</sub>.” In the subsequent variation, an additional “Dha” stroke is added to the beginning of the original phrase, giving two preceding notes before the arrival to the final “Dha<sub>2</sub>” bol. The third variation continues this musical

---

<sup>76</sup> In the ultimate repetition of the tihai the final stroke, “Dha,” marks the arrival of the downbeat and does not contain the subscript “2” like those “Dha” bols in the preceding recurrences.

expansion by adding another bol “Dha” to the musical material of the previously occurring phrase, thus giving three anticipatory notes before the arrival to the final “Dha<sub>2</sub>” bol. Following this variation are four more permutations in which an additional “Dha” bol is similarly added to the previously occurring pattern, which number four, five, six, and seven preceding notes respectively, before the final “Dha<sub>2</sub>” bol. The gradual expansion and elaboration of musical material within this gat evoke the sound-image of the srotogata yati. Concluding the composition is a tihai built from a string of bols adapted from pakhawaj performance practice to the tabla “Dha Dha Te Te Ka Ta Ga Di Ge Na Dha<sub>2</sub>”<sup>77</sup> and the triple repetition of the tihai’s musical material create the sound-image of sama yati, or “ants row.” When composed in Hindustani notation, the images these composition devices create become obfuscated (Figure 6.10).

X	DhaDha <sub>2</sub> Dha	DhaDha <sub>2</sub> Dha	DhaDhaDha <sub>2</sub>	DhaDhaDhaDha
2	Dha <sub>2</sub> DhaDha	DhaDhaDhaDha <sub>2</sub>	SDhaDhaDha	DhaDhaDhaDha <sub>2</sub>
0	SDhaDhaDha	DhaDhaDhaDha	Dha <sub>2</sub> DhaDha	TTKTGDGN
3	Dha <sub>2</sub> DhaDha	TTKTGDGN	Dha <sub>2</sub> DhaDha	TTKTGDGN
X	Dha			

Figure 6.10 *Gat in Teental.*

The thematic development contained within another gat composed by N. Sundar evokes the sound-images of gopuccha yati and sama yati (Figure 6.11).

---

<sup>77</sup> “Te Te Ka Ta Ga Di Ge Na” has been shortened to “TTKTGDGN.”

DhaTeTeDha Tirkit  
 DhaTiDha Tirkit  
 DhaDha Tirkit  
 Dha Tirkit  
 Tirkit

Tihai: DhaSNaDhi NaThaKiTha  
 DhaSNaDhi NaThaKiTha  
 DhaSNaDhi NaThaKiTha | Dha

Figure 6.11 *Gat in Teental*

Unlike the compositional methods used in the gat in figure 6.10, which took a small melodic phrase and continually expanded upon it, the composition scheme employed within the gat in figure 6.11 takes an established phrase “Dha Te Te Dha Tirkit”<sup>78</sup> and diminishes the musical material contained therein in four subsequent permutations. As in the previous gat, this example also concludes with a tihai, which takes a phrase and repeats it three times identically, producing the sound-image of sama yati.

The initial theme of this gat resembles closely the primary theme of the kaida in figure 6.7 but includes a slight modification to produce “Dha Te Te Dha Tirkit.” The first permutation of this theme is created with the removal of one of the dead strokes “Te” from the theme, leaving “Dha Ti Dha Tirkit,” the bol “Ti” being a similar dead stroke like “Te” but commonly appearing in contexts in which only a single dead stroke is played. This musical reduction continues in the subsequent permutation with the removal of the remaining dead stroke, “Ti,” to produce the second variation “Dha Dha Tirkit.” In the two remaining

---

<sup>78</sup> “Tirkit” is an abbreviated form of the bol “TeReKeTa.”

variations the strokes “Dha” are removed individually with each subsequent iteration, making the penultimate and ultimate permutations “Dha Tirkit” and “Tirkit” respectively. Together, the gradual diminution of the phrase material of this gat illustrates the sound-images of the gopuccha yati. Following this musical development is a tihai constructed of a phrase of bols unrelated to the prior musical material “DhaSNaDhi NaThaKiTa.” This phrase is played three times identically, creating the sound-image of sama yati, with the end of the third repetition occurring on the arrival of sam. The following figure shows the division of this gat within the structure of teental (Figure 6.12).

X	DhaTe	TeDha	Tirkit	DhaTi
2	DhaTir	KitDha	DhaTir	KitDha
0	Tirkit	Tirkit	DhaSNaDhi	NaThaKiTa
3	DhaSNaDhi	NaThaKiTa	DhaSNaDhi	NaThaKiTa
X	Dha			

Figure 6.12 *Gat in Teental*

### *Chakradar*

The final musical form to be analyzed for its adherence to the compositional principles of yati is the chakradar. A chakradar composed by Sundar evokes the sound-images created by damaru yati and sama yati (Figure 6.13).

Theme: [	DhaSTirkittak NaSTirkittak DhaSTirkittak NaSTirkittak DhaSTirkit NaSTirkit DhaSTirkit NaSTirkit DhaSTirkittak DhaSTirkit DhaSTirkit DhaSTirkittak DhaSTirkit NaSTirkit DhaKat	
Tihai:	TirkitDhaSNaDhaSNaDha TirkitDhaSNaDhaSNaDha TirkitDhaSNaDhaSNaDha	] X 3

Figure 6.13 *Chakradar* in *Teental*.

Within this *chakradar*, the gradual diminution and re-expansion of thematic music material evoke the distinct geometric shape of the *damaru*, an hourglass-shaped folk drum after which this compositional device is named. Similar to *gats*, the musical material constituting the *chakradar* includes a body of thematic material and concludes with a *tihai*. Like in previous examples, the identical repetition of a musical pattern that defines a *tihai* evokes the sound-image of the *sama yati*. The entire musical form – theme and *tihai* – is repeated three times, with the final note of the last repetition arriving on *sam*.

The development of thematic musical material in this *chakradar* regards a series of strong and weak sonorant pulses – *Dha* and *Na* respectively – connected by varying lengths of non-resonant bols – *Tirkittak* and *Tirkit*. The strong sonority of the bol “*Dha*,” resulting from the combination of the stroke *Ge* on the *dugga* and *Tha* on the *tabla* that together comprise the bol, dominates the lesser sonority of the bol *Na* and serves to demarcate the diminution and

expansion of an established rhythmic pulse in the beginning of the composition. When appearing in the composition, the lesser sonorant bol Na, produced by a single stroke on the kinar of the tabla, bisects the longer durations of non-resonant bols between the pulses established by the succession of “Dha” bols.

The initial two lines in the composition “DhaSTirkittak NaSTirkittak DhaSTirkittak NaSTirkittak”<sup>79</sup> establish the rhythmic pulse with which further permutations will occur. The pulse established between successive “Dha” bols is two matras (beats or units) in length. In the subsequent two lines the number of the non-resonant stroke is diminished from “Tirkittak” to “Tirkit,,” resulting in the pattern of bols “DhaSTirkit NaSTirkit DhaSTirkit NaSTirkit.” With regard to rhythmic duration, this diminution is equivalent to half a matra. Thus, the duration between successive pulses (the bols “Dha”) in this pattern is one and one-half matra, a decrease by half a matra from the beginning two phrases. Immediately following this permutation is another variation that results from a rhythmic diminution of one-half matra: “DhaSTirkittak.” In this variation the bol “Na” is omitted while the number of non-resonant strokes increased from the previous pattern from “Tirkit” to “Tirkittak.” A final diminution occurs with the last permutation “DhaSTirkit,” in which the number of non-resonant strokes are reduced from the previous pattern of “Tirkittak” to “Tirkit,,” making the phrase worth three-fourths of a matra in rhythmic value, a decrease of one-fourth of a matra from the previous pattern. From this point onward in the composition the rhythmic duration between “Dha” bols increases.

---

<sup>79</sup> “S” symbolizes a gap or rest.

Beginning with the musical pattern with the least rhythmic duration – the narrowest portion of the hourglass shape in figure 6.13 – ensuing permutations of thematic material increase the duration between successive “Dha” bols using previously employed bol patterns. From the musical pattern of the smallest rhythmic duration, DhaSTirkit, worth three-fourths of a matra, the permutations that follow are expanded to one matra in duration (DhaSTirkittak) and then to one and one-half matra (DhaSTirkit NaSTirkit). With this gradual rhythmic diminution and expansion of thematic material, the sound-image of the damaru yati is evoked.

Aesthetically, this use of the compositional device produces a distinct aural effect for the listener. As the beginning two phrases establish the rhythmic pulse through the recurrence of the bol “Dha” – which is strengthened further by the cohesive manner in which the patterns fall within the rhythmic divisions of teental – the subsequent permutations create the musical effect of a speeding up and slowing down of the rhythmic pulse established by the bols “Dha.” This rhythmic fluctuation is better illustrated in figure 6.14, which shows the sonorities of the bol “Dha” in the thematic section of this chakradar against the initially established rhythm of the first two phrases. In the diagram, the black boxes represent the points at which the bol “Dha” sound against the rhythmic structure of teental, indicated by the numbers and letters below with the dashes representing a binary subdivision of the vibhags. The arrows underneath indicate a continuation of the rhythmic pulse as established by the “Dha” sonorities of the first two phrases.

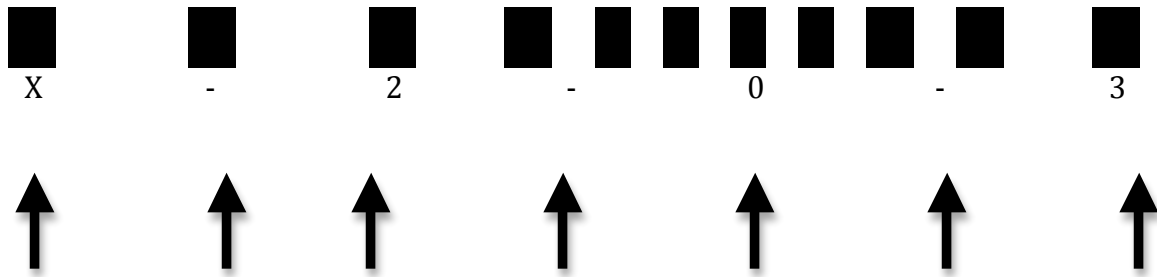


Figure 6.14 *Damaru yati* thematic development in *Chakradar* in *Teentaal*

Expressed in this fashion, the rhythmic diminution between recurring “Dha” bols is expressed by the decreasing space between subsequent black boxes. Starting on the sam at the left, the sonority of the “Dha” stroke occurs on the beginning and intermediate beats of the vibhag. As the rhythmic duration between successive phrases decreases, the blacked out cells become closer and closer to one another. The clustering of cells towards the *khali* vibhag (expressed by the number 0) reflects the narrowest point of the hourglass shape of the damaru sound image, while the expanses outwards from this point reflect the concave shape of the damaru sound-image. Following this thematic diminution and expansion are the bols “Dha Kat,” which provide for a concrete resolution to the previous rounds of musical transformation. Concluding the entirety of the chakradar musical form is a tihai built on the repetition of a phrase containing musical material in an unrelated rhythmic cantor: TirkitDhaS NaDhaSNa Dha. The identical repetition of this phrase three times evokes the sound-image of sama yati. In the course of a performance the entirety of this musical material is played three times with the final bol of the last repetition arriving on the sam. Expressed against the framework of teental the chakradar appears as:

X	[	DhaSTirkittak	NaSTirkittak	DhaSTirkittak	NaSTirkittak
2		DhaSTirkitNaS	TirkitDhaSTir	kitNaSTirkit	DhaSTirkittak
0		DhaSTirkitDhaS	TirkitDhaSTir	kittakDhaSTir	kitNaSTirkit
3		DhaKat	TirkitDha	NaDhaSNa	DhaSTirkit
X		DhaSnaDha	SNaDha	TirkitDha	NaDhaSNa
2		Dha	S	] X 3	

Figure 6.15 *Chakradar* in *Teental*.

### **Analysis of Live Performance**

An analysis of a recorded performance of Nagarajan Sundar participating in a *tala vadya katcheri* from 2002 contains compositional forms that reflect the musical principles discussed above. The performance is in *adi talam* and involves two other percussionists, a *mridangam* player and *ghatam* player. Also sitting on the performances stage is Kadri Gopalnath, an innovator of the *Karnatik saxophone*, a female vocalist, and a disciple of one of the artists who sits behind the performers keeping *tala*.

Because of the cyclic nature of the *tala vadya katcheri*, the musical space allotted to each performing musician is relatively limited in duration. In contrast to the *tabla solo* analyzed in the previous chapter in which the performing artist was the sole musical exponent, the artists participating in a *tala vadya katcheri* divide the musical space amongst the number of respective performers. This allocation of musical space limits the extent to which artists can develop and improvise musical material, keeping the musical material performed compact. In this particular performance each soloist is designated two solo interludes of

substantial length (15 or more avartas) before the *koraippu*, meaning “reduction,” begins in which the musical space allotted to each performer reduces in an established order. During his allotment of musical space Sundar plays two chakradars, which conclude each solo interlude. When analyzed the first of these compositions, the sound-images of two species of yati appear. Preceding these compositions, Sundar plays numerous variations on the *chatusram nadai*, a rhythmic pattern that adheres to a subdivision of four equal parts per akshara, or variations on the teentaal theka. Amidst these musical passages Sundar also plays patterns of thematic musical material that introduces the bols and bol patterns in the chakradars that conclude his solo interludes.

*Mohra* A 38. Sundar begins his solo with a mohra, a phrase that is played three times with the final note of the ultimate iteration arriving on the sam.

*Nadai/Theka* A 39-51. Within these variations of the chatusram nadai and teentaal theka Sundar hints at the upcoming fragment of a *rela* in A 45 and A 51.

*Rela* A 52. The *rela*, meaning “a flood” or “rushing,” is a theme-and-variation composition that is categorized by the rapid articulation of continuous bols. This particular rela “DhiNaGeNa TaKaDhiNa GeNaDhiNa DhaTiGeNa” is a famous composition stemming from the Lucknow tradition. Absent from the performance of this rela is the elaboration (*vistar*) of musical phrases (*paltas*) and concluding tihai that are contained within an exhibition of a rela.

*Chakradar* A 55-58. This chakradar (figure 6.16) begins on the second half of the third akshara of A 55. Contained within the musical material of this composition is a body of thematic material that concludes with a tihai. When analyzed with regard to its thematic development, the phrases of this composition evoke two divergent yati sound-images.

	DhaTirkittak Dha
	DhaTirkittak DhiTirkittak Dha
	DhaTirkittak DhiTirkittak DhaTirkittak
Tihai:	DhaSThiSDhaNaDhaNa DhaSTiSDha
	ThiSDhaNaDhaNa DhaSTiSDha
	DhaNaDhaNa DhaSTiSDha

Figure 6.16 *Chakradar* and *Adi Tala*

Within the compositional framework of this chakradar, the expansion and diminution of musical material evoke srotogata yati and gopuccha yati respectively. The initial phrase “DhaTirkittak Dha” is constructed of the resonant bol “Dha” connected by a string of non-resonant notes “Tirkittak,” which arrives on the sounding of another bol “Dha.” In the subsequent permutation the musical content of the original phrase is expanded with the addition of the bol pattern “Dhi Tirkittak” between the original phrase and its arrival note. The final variation of this established pattern undergoes a similar expansion with the addition of the bols “Dha Tirkittak” within the framework of the previous variation. Together, the rhythmic expansion of these three musical phrases evokes the sound-image of srotogata yati – “moving like a current.” The tihai in

this composition, unlike those examples discussed previously, is not comprised of an established musical pattern played three times verbatim. Rather, this tihai undergoes a rhythmic diminution that evokes the gopuccha yati sound image. From its initial phrase “DhaSThiSDhaNaDhaNa DhaSTiSDha,” the musical phrases of the tihai undergo two permutations. In each subsequent variation the beginning note of the previous line is removed, making the second permutation “ThiSDhaNaDhaNa DhaSTiSDha” and the third variation “DhaNaDhaNa DhaSTiSDha.” This entire body of musical material is performed three times with the final bol of the ultimate repetition arriving on the sam. On the final performance of the musical body constituting this chakradar Sundar performs a slight variation (figure 6.17) on the musical content, which continues to evoke the respective sound-images of the original composition:

DhaTirkit Dha  
DhaTirkit DhiTirkit Dha  
DhaTirkit DhiTirkit DhaTirkit Dha

Thi Dha Tirkit DhaSTiSDha  
DhaTirkit DhaSTiSDha  
Tirkit DhaSTiDha

Figure 6.17 *Chakradar* in *Adi Tala* variation

*Chakradar* A 101. This chakradar contains similar musical content as the chakradar in avartas 55-58 but does not adhere to the compositional practices of yati. Of particular note is the highly syncopated tihai, “DhaDhaSDhaSDhaSDhaDha.”

From avarta 104 onwards is the koraippu, during which the artists are limited to the performance of musical fragments.

## Chapter 7

### Conclusion

Since the tabla entered the spotlight as a solo-performing instrument in the early 20<sup>th</sup> century, musical innovation has often paralleled the new musical spaces in which it has come to inhabit. As I have argued in this thesis, the Karnatik percussion ensemble, also known as the *tala vadya katcheri*, is one such new musical space in which the tabla has come to inhabit within contemporary performance practice. The creation of this new musical space, as discussed in chapters 2 and 3, was a product of Karnatik music's shift to the public sphere and the subsequent efforts to reform Karnatik music during the early 20<sup>th</sup> century. My teacher, Nagarajan Sundar, has been successful in adapting the tabla to this dynamic musical environment. In doing so, he has developed a new tradition of tabla performance in which he synthesizes musical principles from both Hindustani and Karnatik traditions. This method of composition provides for a distinct musical aesthetic that represents a new compositional paradigm within tabla performance practice.

In contrast, my analysis of the tabla tradition of the Mehboob Khansaheb gharana illustrates an adherence to a musical tradition derived from a pedagogical lineage of musicians. The repertoire from this tradition exhibits a distinction in musical aesthetic concerning the particular grouping of musical phrases within a composition. Concomitantly, the repertoire of this tradition also parallels the discerned characteristics of its "parent" school: the Farukhabad

gharana. Thus, this tradition articulates itself as an individualized facet of musical interpretation within the greater myriad of the Farukhabad gharana.

From my experiences within the field of Indian music, the two traditions of tabla discussed in this thesis represent two polar directives regarding the evolution of tabla performance practice. On one hand, many Indian musicians with whom I have come in contact stress the importance of preserving the musical traditions maintained within the many paramparas and gharanas of tabla practice. On the other hand, I have come in contact with other musicians favoring the departure from orthodox practices and the development of new musical forms. Together, these two musical imperatives form a binary that dictates the present state of tabla performance practice. While I agree that the preservation of musical material is of paramount importance to the performance practice of the tabla, I also believe that the creation and development of new musical forms and spaces helps propel the tradition of the tabla further as a diverse solo-performing genre.

## **Appendix A - Musical Transcriptions**

## A note on musical notation

The transcriptions in this thesis incorporate a variety of syllables and markings that are derived from several Indian musical notation systems. The notation has been arranged according to the matras of jhaptaal and the akhsaras of adi talam for each respective transcription. Vibhag divisions and anga divisions have been identified with a series of numerals and letters, with X symbolizing the downbeat throughout. Syllables reflect those corresponding to contemporary tabla performance practice as identified by ethnomusicologists Gottlieb and Kippen. The letter “S” has been used to represent gaps in performance.

The following bols have been abbreviated:

Te Re Ke Ta = Tirkkit

Te Re Ke Ta Ta Ka = Tirkittak

Te Re Ke Ta Ta Ka Te Re = Tirkittaktir

Te Re Ke Ta Ta Ka Ta Re Ke Ta = Tirkittaktirkkit

Te Re Gi Da = Tirgid

Te Re Gi Da Na Ga = Tirgidnag

## Synopsis of Performance: Rajesh Dhawale

Composition	No. of Avartas
Theka	2
Uthan	8
Theka	1
Peshkar (spoken and performed)	18
Theka	2
Kaida (spoken and performed)	19
Theka	2
Gat (spoken and performed)	6
Theka	1
Gat (spoken and performed)	5
Theka	5
Chakradar (spoken and performed)	21
Theka	3
Chakradar (spoken and performed)	18
Theka	2
Tripalli Gat (spoken and performed)	23
Theka	3
Gat (spoken and performed)	5
Theka	9
Layakri (spoken and performed)	23
Theka	2
Chalan	16

Lahara:                      Raag Kalavati (concert pitch)  
     Vibraphone played by author

Jhaptaal (10 matras)

X   -   2   -   -   0   -   3   -



Elapsed Performance Time: 17:24

Avarta 1 (0:12)	
X	S
-	NaSKiTa
2	ThinSKiTa
-	ThinSKiTa
-	NaSThaTi
0	ThinSKeKe
-	DitSTeTe
3	ThinSTeTe
-	DhaDhaSDha
-	GeNaDhaGa

A 2 (0:21)	
X	Dhin
-	SSSKre
2	DhinSSKre
-	DheKreDheKre
-	DhaSDhaGe
0	ThinSTeTe
-	NaKaTeRe
3	DhinSTeTe
-	DhinKreDhinKre
-	DhaSDhaGa

Uthan:

A 3 (0:30)	
X	S
-	S
2	S
-	S
-	S
0	S
-	SSSDha
3	DhaTiDhaS
-	DhaDhaTiDha
-	SDhaDhaTi

A 4 (0:40)	
X	Dhin
-	S
2	S
-	S
-	S
0	S
-	SDhaDhaTi
3	DhaSSDha
-	DhaTiDhaS
-	SDhaDhaTi

A 5 (0:49)	
X	Dhin
-	S
2	S
-	S
-	S
0	SSKatDha
-	DhaTiDhaS
3	KatKatDhaDha
-	TiDhaSKat
-	KatDhaDhaTi

A 6 (0:59)	
X	Dhin
-	S
2	S
-	S
-	SDhaDhaTi
0	DhaTiDhaTi
-	SDhaDhaTi
3	DhaTiDhaTi
-	SDhaDhaTi
-	DhaTiDhaTi

A 7 (1:08)	
X	DhaDhaTirkittaktirkit
-	DhaTirkittakNaTirkittak
2	NaNaTirkittaktirkit
-	DhaTirkittakNaTirkittak
-	DhaDhaTirkittaktirkit
0	DhaDhaTirkittaktirkit
-	NaTirkittakNaTirkittak
3	NaNaTirkittaktirkit
-	DhaDhaTirkittaktirkit
-	NaTirkittakNaTirkittak

A 8 (1:17)	
X	DhaDhaTirkittaktirkit
-	DhaTirkittakNaTirkittak
2	DhaDhaTirkittaktirkit
-	DhaDhaTirkittaktirkit
-	NaTirkittakNaTirkittak
0	NaNaTirkittaktirkit
-	NaTirkittakNaTirkittak
3	DhaDhaTirkittaktirkit
-	DhaDhaTirkittaktirkit
-	DhaTirkittakNaTirkittak

A 9 (1:25)	
X	DhaDhaTirkittaktirkit
-	DhaTirkittakNaTirkittak
2	NaNaTirkittaktirkit
-	NaTirkittakNaTirkittak
-	DhaDhaTirkittaktirkit
0	DhinSDhaDha
-	TirkittaktirkitDhaDha
3	SDhaDhaTirkittak
-	SDhinDhin
-	DhaSDhaDha

A 10 (1:34)	
X	TirkittaktirkitDhin
-	DhaDhaTirkittaktirkit
2	DhaDhaSDha
-	DhaTirkittakSDhin
-	DhinDha
0	DhaDhaTirkittaktirkit
-	DhinSDhaDha
3	TirkittaktirkitDhaDha
-	SDhaDhaTirkittak
-	SDhinDhin

Peshkar:

A 11 (1:43)	
X	Dhin
-	Na
2	DhinSTeTe
-	DhinSTeTe
-	NaNa
0	ThinSKaTa
-	NaKaTreKe
3	DhinSTreKe
-	DhinSTeTe
-	NaSTeTe

A 12 (1:53) (spoken)	
X	<i>DhaTiDhaDhin</i>
-	<i>NaDhaTiTha</i>
2	<i>DhiNaGeNa</i>
-	<i>DhaTiNaDha</i>
-	<i>TitThaThiNa</i>
0	<i>ThaTiThaThi</i>
-	<i>NaThaTiTha</i>
3	<i>DhiNaGeNa</i>
-	<i>DhaTiNaDha</i>
-	<i>TitDhaDhiNa</i>

A 13 (2:01)	
X	DhinSTeTe
-	NaSTeTe
2	DhinSTeTe
-	Dhin
-	NaSTeTe
0	ThinSTeTe
-	NaSTeTe
3	DhinSTeTe
-	DheSTeTe
-	TaSTeTe

A 14 (2:09)	
X	DhinSTeTe
-	NaKeTeTe
2	DhinSGeGe
-	DhinGeDheGe
-	DhaGeDhaGe
0	Thin
-	NaNaKaTirkit
3	DhinSTreKe
-	DhinSSKre
-	NaSTeTe

A 15 (2:17)	
X	DhaTiDhaDhin
-	NaDhaTiTha
2	DhiNaGeNa
-	DhaTiNaDha
-	TitThaThiNa
0	ThaTiThaThi
-	NaThaTiTha
3	DhiNaGeNa
-	DhaTiNaDha
-	TitDhaDhiNa

A 16 (2:26)	
X	DhaTiDhaDhin
-	NaDhaTiTha
2	SSGeGe
-	DhaTiNaDha
-	TitThaThiNa
0	ThaTiThaThi
-	S
3	SSDhinDhin
-	DhaTiNaDha
-	TitDhaDhiNa

A 17 (2:35)	
X	DhaTiDhaThin
-	SDhaTiDha
2	ThinSThaTi
-	ThaThinSDha
-	TiDhaDhinS
0	DhaTiThaThin
-	SThaTiTha
3	TeTeThaTi
-	ThaTeTeTha
-	TiThaTeTe

A 18 (2:43)	
X	GeTeGeGeTeGeGe
-	NaDhaTiS
2	SNaGeTeGeGe
-	TeGeGeNaDhaTi
-	SNaThiNa
0	KeTeKeKeTeKeKe
-	NaThaTiS
3	DSNaGeTeGeGe
-	TeGeGeNaDhaTi
-	SNaDhiNa

A 19 (2:51)	
X	DhinDhinDhaTi
-	DhaDhinDhinDha
2	TiDhaThinThin
-	NaTiNaDhin
-	DhinDhaTiDha
0	DhinDhinDhaTi
-	DhaDhinDhinDha
3	TiDhaThinThin
-	NaTiNaDhin
-	DhinDhaTeTe

A 20 (3:00)	
X	DhinDhinDhaTi
-	DhaDhiNaSDhaGeNa
2	NaThinNaKeThinNaKa
-	ThiNaKaDhaDhin
-	NaDhaDhinNa
0	SDhaThinNa
-	SDhaThinNa
3	SDhaDhinDha
-	SDhaThinNa
-	SDhaDhinDha

A 21 (3:09)	
X	DhaTiDhaDhin
-	NaDhaTiTha
2	DhiNaGeNa
-	DhaTiNaDha
-	TitThaThiNa
0	ThinTiThaThi
-	NaThaTiTha
3	DhiNaDhaTi
-	DhaTiNaDha
-	TitDhaDhiNa

A 22 (3:17)	
X	DhaTiDhaDhin
-	SDhaDhinNa
2	SDhaGeDhinNa
-	NaThinNaThin
-	NaThaThiNa
0	ThaTiThaThin
-	SThaThinNa
3	SDhaDhiNa
-	DhaTiDhaTi
-	DhaDhaDhiNa

A 23 (3:26)	
X	SDhaSGeNa
-	SDhaDhiNa
2	SDhaDhiNa
-	DhaTiDhaTi
-	DhaDhaThiNa
0	SThaSTha
-	SThaThiNa
3	SDhaDhinNa
-	DhaTiDhaTi
-	DhaDhaDhiNa

A 24 (3:35)	
X	DhaSSDhaTiDhaGeNa
-	DhaTiDhaGeDhiNaGeNa
2	DhinNaDhaTi
-	DhaGeNaDha
-	TiDhaKeNa
0	ThiNaSThaTiThaKeNa
-	ThaTiThaKeThiNaKeNa
3	DhinNaDhaTi
-	DhaGeNaDha
-	TiDhaGeNa

A 25 (3:44)	
X	DhiNaSDhaTiDhaGeNa
-	DhaTiDhaGeDhiNaSDha
2	TiDhaGeNaDhaTiDhaGe
-	DhiNaGeNaDhaTi
-	SDhaDhaThiNa
0	ThiNaSThaTiThaKeNa
-	ThaTiThaGeDhiNaSDha
3	TiDhaGeNaDhaTiDhaGe
-	DhiNaGeNaDhaTi
-	DhaDhaDhiNa

A 26 (3:52)	
X	DhiNaSDhaTiDhaGeNa
-	DhaTiDhaGeDhiNaSDha
2	TiDhaGeNaDhaTiDhaGe
-	DhaTiDhaGeDhaTi
-	DhaGeThiNaKeNa
0	ThiNaSThaTiThaKeNa
-	ThaTiThaGeDhiNaSDha
3	TiDhaGeNaDhaTiDhage
-	DhaTiDhaGeDhaTi
-	DhaGeDhiNaGeNa

A 27 (4:01)	
X	DhaSSDhaTiDhaGeNa
-	DhaTiDhaGeDhiNaGeNa
2	DhiNaSDhaTiDhaGeNa
-	DhaSSDhaTiDhaGeNa
-	ThaTiThaKeThiNaKeNa
0	ThaSSThaTiThaKeNa
-	ThaTiThaKeThiNaKeNa
3	DhiNaSDhaTiDhaGeNa
-	DhaSSDhaTiDhaGeNa
-	DhaTiDhaGeDhiNaGeNa

A 28 (4:09)	
X	DhaSSDhaSSDhaTi
-	DhaGeNaDhaSSDhaS
2	SDhaTiDhaGeNaDhaS
-	SDhaGeNaDhaTiDhaGe
-	ThaTiThaKeThiNaKeNa
0	ThaSSThaSSThaTi
-	ThaKeNaDhaSSDhaS
3	SDhaTiDhaGeNaDhaS
-	SDhaGeNaDhaTiDhaGe
-	DhaTiDhaGeDhiNaGeNe

A 29 (4:18)	
X	KiTATaKaThiSNaS
-	KiTATaKaThiNaThiNa
2	SDhiNaKaTeReKeTa
-	NaKeTeReKeTaTaKa
-	ThaKaNaThaKaNaTeTe
0	NaKeTeReKeTaTaKa
-	TeTeThaKeNaSNaDha
3	ThiSSNaSSGeS
-	SNaSThiSSNaS
-	SSGeSSNaSS

A 30 (4:26)	
X	Dhin
-	SSTeTe
2	DhinSTeTe
-	DhinSTeTe
-	DhaTiDhaTi
0	ThinSTeTe
-	Na
3	Dhin
-	S
-	S

Kaida:

A 34 (5:01)	
X	S
-	ThinSTeTe
2	ThinSTeTe
-	NaSTeTe
-	NaSTeTe
0	ThinSTeTe
-	NaKaTeTe
3	DhinSTeTe
-	DhinSTeTe
-	DhaSTeTe

A 35 (5:09) (spoken)	
X	<i>DhaTirkidDha</i>
-	<i>GeNaDhaGe</i>
2	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkid</i>
-	<i>ThiNaKeNa</i>
0	<i>ThaTirkidTha</i>
-	<i>KeNaThaKa</i>
3	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkid</i>
-	<i>DhiNaGeNa</i>

A 36 (5:18)	
X	<i>DhaTirkitDha</i>
-	<i>GeNaDhaGe</i>
2	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkit</i>
-	<i>ThiNaKeNa</i>
0	<i>ThaTirkitTha</i>
-	<i>KeNaThaKa</i>
3	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkit</i>
-	<i>DhiNaGeNa</i>

A 37 (5:27)	
X	<i>DhaTirkitDha</i>
-	<i>GeNaDhaGe</i>
2	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkit</i>
-	<i>ThiNaKeNa</i>
0	<i>ThaTirkitTha</i>
-	<i>KeNaThaKa</i>
3	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkitDhaGe</i>
-	<i>TirkitDhiNaGeNa</i>

A 38 (5:35)	
X	<i>DhaTirkitDha</i>
-	<i>GeNaDhaGe</i>
2	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkitDhaGe</i>
-	<i>TirkitThiNaKeNa</i>
0	<i>ThaTirkitTha</i>
-	<i>KeNaThaKa</i>
3	<i>DhiNaGeNa</i>
-	<i>DhaGeTirkitDhaGe</i>
-	<i>TirkitDhiNaGeNa</i>

A 39 (5:44)	
X	<i>DhinSTeTe</i>
-	<i>Na</i>
2	<i>SSDheTe</i>
-	<i>DheTeDheTe</i>
-	<i>DheTeDheTe</i>
0	<i>Dhin</i>
-	<i>S</i>
3	<i>S</i>
-	<i>SSKraKra</i>
-	<i>SDhaGeNa</i>

A 40 (5:52)	
X	DhaTirkitDha
-	GeNaDhaGe
2	DhiNaGeNa
-	DhaGeTirkit
-	ThiNaKeNa
0	ThaTirkitTha
-	KeNaThaKa
3	DhiNaGeNa
-	DhaGeTirkit
-	DhiNaGeNa

A 41 (6:01)	
X	DhaTirkitDha
-	GeNaDhaGe
2	DhiNaGeNa
-	DhaGeTirkitDhaGe
-	TirkitThiNaKeNa
0	ThaTirkitTha
-	KeNaThaKa
3	DhiNaGeNa
-	DhaGeTirkitDhaGe
-	TirkitDhiNaGeNa

A 42 (6:09)	
X	DhaTirkitDha
-	GeNaDhaGe
2	DhiNaGeNa
-	SSSSDhiNaGeNa
-	DhaTiDhaGeThiNaKeNa
0	ThaTirkitTha
-	KeNaThaKa
3	DhiNaGeNa
-	SSSSDhiNaGeNa
-	DhaTiDhaGeDhiNaGeNa

A 43 (6:18)	
X	DhaTirkitDha
-	GeNaDhaGe
2	DhiNaGeNa
-	DhaGeTirkit
-	ThiNaKeNa
0	ThaTirkitTha
-	KeNaThaKa
3	DhiNaGeNa
-	DhaGeTirkit
-	DhiNaGeNa

A 44 (6:26)	
X	DhaTirkitDha
-	GeNaDhaGe
2	DhiNaGeNa
-	DhiNaDhaTi
-	DhaTirkitDhaGeNaDhaGe
0	ThaTiThin
-	SThiNaNaTiDhi
3	ThaTiThin
-	NaThaThiNa
-	ThaTirkitTha

A 45 (6:35)	
X	ThaTirkitTha
-	KeNaThaKa
2	ThiNaGeNa
-	ThaKeTirkit
-	ThiNaKeNa
0	DhaTirkitDha
-	KeNaThaKa
3	DhiNaGeNa
-	DhiNaGeNa
-	DhiNaGeNa

A 46 (6:43)	
X	DhaTirkitDhaGeNaDhaGe
-	DhiNaGeNaDhaGeTirkit
2	ThiNakeNaThaTirkitTha
-	KeNaTaKeThiNaKeNa
-	DhaGeTirkitDhiNaGeNa
0	DhaTirkitDhaGeNaDhaGe
-	DhiNaGeNaDhaGeTirkit
3	ThiNakeNaThaTirkitTha
-	KeNaTaKeThiNaKeNa
-	DhaGeTirkitDhiNaGeNa

A 47 (6:51)	
X	DhaTirkitDhaGeNaDhaGe
-	DhiNaSDhaTiDhaGeNa
2	DhiNaGeNaDhaTirkitDha
-	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitThiNaKeNa
0	ThaTirkitThaKeNaThaKe
-	ThiNaSThaTiThaKeNa
3	ThiNaKeNaDhaTirkitDha
-	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa

A 48 (7:00)	
X	DhaGeTirkitDhiNaGeNa
-	DhiNaGeNaDhaTirkitDha
2	GeNaDhaGeThiNaKeNa
-	DhaGeTirkitDhiNaGeNa
-	ThaKeTirkitThiNaKeNa
0	ThiNaKeNaDhaGeTirkit
-	DhiNaGeNaDhaTirkitDha
3	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	DhiNaGeNaDhaGeDhiNa

A 49 (7:08)	
X	GeNaDhaGeDhiNaDhiNa
-	GeNaDhaGeDhaTirkitDha
2	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	ThaTiThiNaKeNaThaTi
0	ThiNaKeNaThaTiThaTi
-	ThiNaKeNaDhaTirkitDha
3	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	DhiNaDhiNaDhiNaGeNa

A 50 (7:17)	
X	GeNaDhiNaDhiNaDhiNa
-	DhiNaGeNaDhaTirkitDha
2	GeNeDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	ThaTiThaTiThaThiNa
0	KeNaThaTiThaTiThaTi
-	ThiNaKeNaDhaTirkitDha
3	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	DhaSTirkittaktirkitDhaGe

A 51 (7:25)	
X	DhiNaGeNaSSDhaGe
-	DhiNaGeNaDhaTirkitDha
2	GeNaDhaGeThiNaKeNa
-	ThaKeTirkitThiNaKeNa
-	ThaSTirkittaktirkitThaKe
0	ThiNaKeNaSSThaKe
-	ThiNaKeNaDhaTirkitDha
3	GeNaDhaGeDhiNaGeNa
-	DhaGeTirkitDhiNaGeNa
-	DhaSTirkittaktirkitDhaGe

A 52 (7:33)	
X	DhiNaGeNaDhaSTirkittak
-	TirkitDhaGeDhiNaGeNa
2	SSDhaGeDhiNaGeNa
-	DhaSTirkitDhiNaGeNa
-	ThaSTirkittaktirkitThaKe
0	ThiNaKeNaThaSTirkittak
-	TirkitThaKeThiNaKeNa
3	SSDhaGeDhiNaGeNa
-	DhaSTirkitDhiNaGeNa
-	DhaTiDhaGeDhiNaGeNa

A 53 (7:41)	
X	DhaTirkitDhaGeNaDhaS
-	SDhaSDhi
2	SGeSNa
-	DhaSSSDhaTirkitDha
-	GeNaDhaSSSDhaS
0	SDhiSGe
-	SNaDha
3	DhaTirkitDhaGeNaDhaS
-	SDhaSDhi
-	SGeSNa

A 54 (7:49)	
X	Dhin
-	
2	
-	
-	
0	
-	
3	
-	
-	

End Vilambit Section

A 55 (8:03)	
X	Dhin
-	Na
2	Dhin
-	DheTe
-	NaNa
0	Thin
-	NaNa
3	Dhin
-	DheTe
-	Na

A 56 (8:07)	
X	Dhin
-	Na
2	Dhin
-	DheTe
-	NaNa
0	Thin
-	NaNa
3	Dhin
-	DheTe
-	Na

Gat:

A 57 (8:11) (spoken)	
X	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
2	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
-	<i>DhirDhirKittak</i>
0	<i>TakitDha</i>
-	<i>DhaSDhirDhir</i>
3	<i>KittakTakit</i>
-	<i>Dha</i>
-	<i>DhirDhirKat</i>

A 58 (8:14)	
X	<i>DhirDhirKat</i>
-	<i>DhaOne</i>
2	<i>TwoThree</i>
-	<i>FourSDhirDhir</i>
-	<i>KatDha</i>
0	<i>OneTwo</i>
-	<i>ThreeFour</i>
3	<i>DhirDhirKat</i>
-	<i>DhaOne</i>
-	<i>TwoThree</i>

A 59 (8:18)	
X	Four
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	DhinSNaNa
-	NaNaDhin
-	NaNaNana

A 60 (8:22)	
X	Dhin
-	Na
2	Dhin
-	Thin
-	Na
0	Thin
-	Na
3	DhinTir
-	KitDhe
-	NaGe

A 61 (8:25)	
X	DhirDhirKittak
-	TakitDha
2	DhirDhirKittak
-	TakitDha
-	DhirDhirKittak
0	TakitDha
-	DhaSDhirDhir
3	KittakTakit
-	Dha
-	DhirDhirKat

A 62 (8:29)	
X	DhirDhirKat
-	DhaGe
2	GeGe
-	GeSDhirDhir
-	KatDha
0	GeGe
-	GeGe
3	DhirDhirKat
-	DhaGe
-	GeGe

A 63 (8:33)	
X	Dhin
-	Na
2	Thin
-	Te
-	Na
0	Thin
-	Na
3	DhinSTir
-	KitDhe
-	NaGe

A 64 (8:37)	
X	Dhin
-	Na
2	Dhin
-	Dhin
-	Na
0	Thin
-	Na
3	Dhin
-	Dhin
-	NaGe

Gat:

A 65 (8:41) (spoken)	
X	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
2	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
-	<i>DhirDhirKittak</i>
0	<i>TakitDha</i>
-	<i>TeTeKaTa</i>
3	<i>GaDiGeNa</i>
-	<i>DhaSDhirDhir</i>
-	<i>KittakTakit</i>

A 66 (8:44)	
X	<i>Dha</i>
-	<i>TeTeKaTa</i>
2	<i>GaDiGeNa</i>
-	<i>DhaSDhirDhir</i>
-	<i>KittakTakit</i>
0	<i>Dha</i>
-	<i>TeTeKaTa</i>
3	<i>GaDiGeNa</i>
-	<i>DhaSDhirDhir</i>
-	<i>KittakTakit</i>

A 67 (8:48)	
X	Dhin
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	DhinSTir
-	KitDhe
-	NaGe

A 68 (8:52)	
X	DhirDhirKittak
-	TakitDha
2	DhirDhirKittak
-	TakitDha
-	DhirDhirKittak
0	TakitDha
-	TeTeKaTa
3	GaDiGeNa
-	DhaSDhirDhir
-	KittakTakit

A 69 (8:56)	
X	Dha
-	TeTeKaTa
2	GaDiGeNa
-	DhaSDhirDhir
-	KittakTakit
0	Dha
-	TeTeKaTa
3	GaDiGeNa
-	DhaSDhirDhir
-	KittakTakit

A 70 (9:00)	
X	Dhin
-	Na
2	Dhin
-	Te
-	Na
0	Thin
-	Na
3	DhinSSKre
-	DheTe
-	Na

A 71 (9:04)	
X	Dhin
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	Dhin
-	Dhin
-	Na

A 72 (9:07) (dialogue)	
X	S
-	S
2	S
-	S
-	S
0	S
-	S
3	S
-	S
-	Na

A 73 (9:11)	
X	Dhin
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	Dhin
-	Dhe
-	Na

A 74 (9:15)	
X	Dhin
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	Dhin
-	Dhe
-	Na

A 75 (9:19)	
X	Dhin
-	Na
2	Dhin
-	Dhe
-	Na
0	Thin
-	Na
3	Dhin
-	Dhin
-	Na

Tipalli Chakradar:

A 76 (9:23) (spoken)	
X	<i>DhaSNa</i>
-	<i>DhiKiTa</i>
2	<i>DhaTreKe</i>
-	<i>DhiKiTa</i>
-	<i>TaKiTa</i>
0	<i>DhaTreKe</i>
-	<i>DhiKiTa</i>
3	<i>Na</i>
-	<i>KatSTeTe</i>
-	<i>GeGeTeTe</i>

A 77 (9:27)	
X	<i>DhaTreKeDhi</i>
-	<i>KiTaGeNa</i>
2	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
0	<i>TakKran</i>
-	<i>Dha</i>
3	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>

A 78 (9:30)	
X	<i>TakKran</i>
-	<i>Dha</i>
2	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
0	<i>TakKran</i>
-	<i>Dha</i>
3	<i>DhaSNa</i>
-	<i>DhiKiTa</i>
-	<i>DhaTreKe</i>

A 79 (9:34)	
X	<i>DhiKiTa</i>
-	<i>TaKiTa</i>
2	<i>DhaTreKe</i>
-	<i>DhiKiTa</i>
-	<i>Na</i>
0	<i>KatSTeTe</i>
-	<i>GeGeTeTe</i>
3	<i>DhaTreKeDhi</i>
-	<i>KiTaGeNa</i>
-	<i>DhaTirkittak</i>

A 80 (9:38)	
X	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
2	<i>TakKran</i>
-	<i>Dha</i>
-	<i>DhaTirkittak</i>
0	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
3	<i>TakKran</i>
-	<i>Dha</i>
-	<i>DhaTirkittak</i>

A 81 (9:42)	
X	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
2	<i>TakKran</i>
-	<i>Dha</i>
-	<i>DhaSNa</i>
0	<i>DhiKiTa</i>
-	<i>DhaTreKe</i>
3	<i>DhiKiTa</i>
-	<i>TaKiTa</i>
-	<i>DhaTreKe</i>

A 82 (9:46)	
X	<i>DhiKiTa</i>
-	<i>Na</i>
2	<i>KatSTeTe</i>
-	<i>GeGeTeTe</i>
-	<i>DhaTreKeDhi</i>
0	<i>KiTaGeNa</i>
-	<i>DhaTirkittak</i>
3	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>TakKran</i>

A 83 (9:50)	
X	<i>Dha</i>
-	<i>DhaTirkittak</i>
2	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>TakKran</i>
0	<i>Dha</i>
-	<i>DhaTirkittak</i>
3	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>TakKran</i>

A 84 (9:53)	
X	<i>Dhin</i>
-	Na
2	Dhin
-	Dhin
-	Na
0	Thin
-	Na
3	Thin
-	Thin
-	Na

A 85 (9:57)	
X	Thin
-	NaNa
2	S
-	TeTe
-	
0	SSTeTe
-	NaSKiTa
3	Thin
-	TeTe
-	TaKaTirkit

A 86 (10:01)	
X	DhinDhin
-	Na
2	DhiNa
-	GeDhi
-	NaGe
0	ThinThin
-	NaGe
3	DhiNa
-	GeDhi
-	NaGe

A 87 (10:05)	
X	DhinDhin
-	NaGe
2	DhiNaNa
-	DhiNaNa
-	DhiNaNa
0	ThiNaNa
-	ThiNaNa
3	ThiNaNa
-	DhiNaNa
-	DhiNaNa

A 88 (10:09)	
X	Dhin
-	Na
2	DhinSSKre
-	Dhin
-	Na
0	Thin
-	Na
3	DhinTir
-	kitDhe
-	Na

A 89 (10:12)	
X	DhaSNa
-	DhiKiTa
2	DhaTreKe
-	DhiKiTa
-	TaKiTa
0	DhaTreKe
-	DhiKiTa
3	Na
-	KatSTeTe
-	GeGeTeTe

A 90 (10:16)	
X	DhaTreKeDhi
-	KiTaGeNa
2	DhaTirkittak
-	NaTirkittak
-	NaTirkittak
0	TakKran
-	Dha
3	DhaTirkittak
-	NaTirkittak
-	NaTirkittak

A 91 (10:20)	
X	TakKran
-	Dha
2	DhaTirkittak
-	NaTirkittak
-	NaTirkittak
0	TakKran
-	Dha
3	DhaSNa
-	DhiKiTa
-	DhaTreKe

A 92 (10:23)	
X	DhiKiTa
-	TaKiTa
2	DhaTreKe
-	DhiKiTa
-	Na
0	KatSTeTe
-	GeGeTeTe
3	DhaTreKeDhi
-	KiTaGeNa
-	DhaTirkittak

A 93 (10:27)	
X	NaTirkittak
-	NaTirkittak
2	TakKran
-	Dha
-	DhaTirkittak
0	NaTirkittak
-	NaTirkittak
3	TakKran
-	Dha
-	DhaTirkittak

A 94 (10:31)	
X	NaTirkittak
-	NaTirkittak
2	TakKran
-	Dha
-	DhaSNa
0	DhiKiTa
-	DhaTreKe
3	DhiKiTa
-	TaKiTa
-	DhaTreKe

A 95 (10:35)	
X	DhiKiTa
-	Na
2	KatSTeTe
-	GeGeTeTe
-	DhaTreKeDhi
0	KiTaGeNa
-	DhaTirkittak
3	NaTirkittak
-	NaTirkittak
-	TakKran

A 96 (10:38)	
X	Dha
-	DhaTirkittak
2	NaTirkittak
-	NaTirkittak
-	TakKran
0	Dha
-	DhaTirkittak
3	NaTirkittak
-	NaTirkittak
-	TakKran

A 97 (10:42)	
X	Dhin
-	Na
2	Dhin
-	TeTe
-	Na
0	Thin
-	Na
3	DhinSSKre
-	Dhin
-	NaGe

A 98 (10:46)	
X	Dhin
-	Na
2	Dhin
-	DheTe
-	Na
0	Thin
-	Na
3	Dhin
-	Dhin
-	NaGe

A 99 (10:50)	
X	Dhin
-	Na
2	Dhin
-	DheTe
-	Na
0	Thin
-	Na
3	DhinTir
-	KitDhe
-	Na

Chakradar:

A 100 (10:54) (spoken)	
X	<i>DheSTeTe</i>
-	<i>Dha</i>
2	<i>DhirDhirKittak</i>
-	<i>DhaSTirkit</i>
-	<i>Dhe</i>
0	<i>TaSKiTa</i>
-	<i>TaKaDhiS</i>
3	<i>SSTaKa</i>
-	<i>DhiNaGeNa</i>
-	<i>Dha</i>

A 101 (10:58)	
X	<i>TaKaDha</i>
-	<i>SSTaKa</i>
2	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
0	<i>DheSTeTe</i>
-	<i>Dha</i>
3	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>

A 102 (11:02)	
X	<i>DheSTeTe</i>
-	<i>Dha</i>
2	<i>DhaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
0	<i>DheSTeTe</i>
-	<i>Dha</i>
3	<i>DheSTeTe</i>
-	<i>Dha</i>
-	<i>DhirDhirKittak</i>

A 103 (11:05)	
X	<i>DhaSTirkit</i>
-	<i>Dhe</i>
2	<i>TaSKiTa</i>
-	<i>TaKaDhiS</i>
-	<i>SSTaKa</i>
0	<i>DhiNaGeNa</i>
-	<i>Dha</i>
3	<i>TaKaDha</i>
-	<i>SSTaKa</i>
-	<i>DhaTirkittak</i>

A 104 (11:09)	
X	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
2	<i>DheSTeTe</i>
-	<i>Dha</i>
-	<i>DhaTirkittak</i>
0	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
3	<i>DheSTeTe</i>
-	<i>Dha</i>
-	<i>DhaTirkittak</i>

A 105 (11:13)	
X	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
2	<i>DheSTeTe</i>
-	<i>Dha</i>
-	<i>DheSTeTe</i>
0	<i>Dha</i>
-	<i>DhirDhirKittak</i>
3	<i>DhaSTirkit</i>
-	<i>Dhe</i>
-	<i>TaSKiTa</i>

A 106 (11:17)	
X	<i>TaKaDhiS</i>
-	<i>SSTaKa</i>
2	<i>DhiNaGeNa</i>
-	<i>Dha</i>
-	<i>TaKaDha</i>
0	<i>SSTaKa</i>
-	<i>DhaTirkittak</i>
3	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>DheSTeTe</i>

A 107 (11:21)	
X	<i>Dha</i>
-	<i>DhaTirkittak</i>
2	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>DheSTeTe</i>
0	<i>Dha</i>
-	<i>DhaTirkittak</i>
3	<i>NaTirkittak</i>
-	<i>NaTirkittak</i>
-	<i>DheSTeTe</i>

A 108 (11:25)	
X	<i>Dhin</i>
-	Na
2	Dhin
-	Te
-	Na
0	Thin
-	Na
3	Thin
-	NaNaNKa
-	NaNaNKa

A 109 (11:28)	
X	DhinDhin
-	NaSKiTa
2	DhinNa
-	ThinNa
-	NaTirkit
0	Thin
-	KaKa
3	KaKa
-	Ka
-	S

A 110 (11:33)	
X	DheSTeTe
-	Dha
2	DhirDhirKittak
-	DhaSTirkit
-	Dhe
0	TaSKiTa
-	TaKaDhiS
3	SSTaKa
-	DhiNaGeNa
-	Dha

A 111 (11:36)	
X	TaKaDha
-	SSTaKa
2	DhaTirkittak
-	NaTirkittak
-	NaTirkittak
0	DheSTeTe
-	Dha
3	DhaTirkittak
-	NaTirkittak
-	NaTirkittak

A 112 (11:40)	
X	DheSTeTe
-	Dha
2	DhaTirkittak
-	NaTirkittak
-	NaTirkittak
0	DheSTeTe
-	Dha
3	DheSTeTe
-	Dha
-	DhirDhirKittak

A 113 (11:43)	
X	DhaSTirkit
-	Dhe
2	TaSKiTa
-	TaKaDhiS
-	SSTaKa
0	DhiNaGeNa
-	Dha
3	TaKaDha
-	SSTaKa
-	DhaTirkittak

A 114 (11:47)	
X	NaTirkittak
-	NaTirkittak
2	DheSTeTe
-	Dha
-	DhaTirkittak
0	NaTirkittak
-	NaTirkittak
3	DheSTeTe
-	Dha
-	DhaTirkittak

A 115 (11:51)	
X	NaTirkittak
-	NaTirkittak
2	DheSTeTe
-	Dha
-	DheSTeTe
0	Dha
-	DhirDhirKittak
3	DhaSTirkit
-	Dhe
-	TaSKiTa

A 116 (11:55)	
X	TaKaDhiS
-	SSTaKa
2	DhiNaGeNa
-	Dha
-	TaKaDha
0	SSTaKa
-	DhaTirkittak
3	NaTirkittak
-	NaTirkittak
-	DheSTeTe

A 117 (11:59)	
X	Dha
-	DhaTirkittak
2	NaTirkittak
-	NaTirkittak
-	DheSTeTe
0	Dha
-	DhaTirkittak
3	NaTirkittak
-	NaTirkittak
-	DheSTeTe

A 118 (12:02)	
X	Dhin
-	Na
2	Thin
-	Te
-	Na
0	Thin
-	Na
3	Thin
-	TeTe
-	Na

A 121 (12:13)	
X	S
-	S
2	S
-	TaKa
-	TaKa
0	Thin
-	TaKa
3	Thin
-	Thin
-	Na

A 122 (12:17) (spoken)	
X	<i>Dhin</i>
-	<i>Na</i>
2	<i>Dhin</i>
-	<i>Dhin</i>
-	<i>Na</i>
0	<i>Thin</i>
-	<i>Na</i>
3	<i>Dhin</i>
-	<i>Dhin</i>
-	<i>Na</i>

Avarta 119-20 dialogue:

Tripalli Gat:

A 123 (12:21)	
X	<i>KatSTe</i>
-	<i>TeTeTe</i>
2	<i>KaTaGa</i>
-	<i>DiGeNa</i>
-	<i>DhaTreKe</i>
0	<i>DhiKiTa</i>
-	<i>KaTaGa</i>
3	<i>DiGeNa</i>
-	<i>NaGeNa</i>
-	<i>NaGeNa</i>

A 124 (12:26)	
X	<i>NaGeTi</i>
-	<i>RiKiTa</i>
2	<i>DhaTreKe</i>
-	<i>DhiKiTa</i>
-	<i>KaTaGa</i>
0	<i>DiGeNa</i>
-	<i>NaGeNa</i>
3	<i>NaGeNa</i>
-	<i>NaGeTi</i>
-	<i>RiKiTa</i>

A 125 (12:29)	
X	<i>DhaTreKe</i>
-	<i>DhiKiTa</i>
2	<i>KaTaGa</i>
-	<i>DiGeNa</i>
-	<i>NaGeNa</i>
0	<i>NaGeNa</i>
-	<i>NaGeTi</i>
3	<i>RiKiTa</i>
-	<i>Dha</i>
-	<i>S</i>

A 126 (12:32)	
X	<i>NaGeNa</i>
-	<i>NaGeNa</i>
2	<i>NaGeTi</i>
-	<i>RiKiTa</i>
-	<i>Dha</i>
0	<i>S</i>
-	<i>NaGeNa</i>
3	<i>NaGeNa</i>
-	<i>NaGeTi</i>
-	<i>RiKiTa</i>

A 127 (12:36)	
X	<i>KatSTeTe</i>
-	<i>TeTeKaTa</i>
2	<i>GaDiGeNa</i>
-	<i>DhaTreKeDhi</i>
-	<i>KiTaKaTa</i>
0	<i>GaDiGeNa</i>
	<i>NaGeNaNa</i>
3	<i>GeNaNaGe</i>
-	<i>TiRiKiTa</i>
-	<i>DhaTreKeDhi</i>

A 128 (12:40)	
X	<i>KiTaKaTa</i>
-	<i>GaDiGeNa</i>
2	<i>NaGeNaNa</i>
-	<i>GeNaNaGe</i>
-	<i>TiRiKiTa</i>
0	<i>DhaTreKeDhi</i>
-	<i>KiTaKaTa</i>
3	<i>GaDiGeNa</i>
-	<i>NaGeNaNa</i>
-	<i>GeNaNaGe</i>

A 129 (12:44)	
X	<i>GeNaNaGe</i>
-	<i>TiRiKiTa</i>
2	<i>Dha</i>
-	<i>NaGeNaNa</i>
-	<i>GeNaNaGe</i>
0	<i>TiRiKiTa</i>
-	<i>Dha</i>
3	<i>NaGeNaNa</i>
-	<i>GeNaNaGe</i>
-	<i>TiRiKiTa</i>

A 130 (12:47)	
X	<i>KatSTeTeTeTe</i>
-	<i>KaTaGaDiGeNa</i>
2	<i>DhaTreKeDhiKiTa</i>
-	<i>KaTaGaDiGeNa</i>
-	<i>NaGeNaNaGeNe</i>
0	<i>NaGeTiRiKiTa</i>
-	<i>DhaTreKeDhiKiTa</i>
3	<i>KaTaGaDiGeNa</i>
-	<i>NaGeNaNaGeNa</i>
-	<i>NaGeTiRiKiTa</i>

A 131 (12:51)	
X	<i>DhaTreKeDhiKiTa</i>
-	<i>KaTaGaDiGeNa</i>
2	<i>NaGeNaNaGeNa</i>
-	<i>NaGeTiRiKiTa</i>
-	<i>Dha</i>
0	<i>NaGeNaNaGeNa</i>
-	<i>NaGeTiRiKiTa</i>
3	<i>Dha</i>
-	<i>NaGeNaNaGeNa</i>
-	<i>NaGeTiRiKiTa</i>

A 132 (12:55)	
X	<i>Dhin</i>
-	Na
2	Thin
-	Thin
-	Na
0	Thin
-	Na
3	DhinSSKre
-	DheTe
-	Na

A 133 (12:59)	
X	Dhin
-	Na
2	Dhin
-	Thin
-	TeTe
0	TeTe
-	Na
3	ThaTir
-	KitTha
-	Tirkit

A 134 (13:03)	
X	DhinDhin
-	DhaNa
2	DhinDhin
-	DhaDhin
-	DhinDha
0	TeTe
-	NaTe
3	ThinSTeTe
-	ThuNa
-	NaTe

A 135 (13:06)	
X	Thin
-	Na
2	Thin
-	Thin
-	Na
0	Thin
-	Na
3	DhinSSKre
-	DhinTe
-	Na

A 136 (13:10)	
X	KatSTe
-	TeTeTe
2	KaTaGa
-	DiGeNa
-	DhaTreKe
0	DhiKiTa
-	KaTaGa
3	DiGeNa
-	NaGeNa
-	NaGeNa

A 137 (13:14)	
X	NaGeTi
-	RiKiTa
2	DhaTreKe
-	DhiKiTa
-	KaTaGa
0	DiGeNa
-	NaGeNa
3	NaGeNa
-	NaGeTi
-	RiKiTa

A 138 (13:18)	
X	DhaTreKe
-	DhiKiTa
2	KaTaGa
-	DiGeNa
-	NaGeNa
0	NaGeNa
-	NaGeTi
3	RiKiTa
-	Dha
-	S

A 139 (13:21)	
X	NaGeNa
-	NaGeNa
2	NaGeTi
-	RiKiTa
-	Dha
0	S
-	NaGeNa
3	NaGeNa
-	NaGeTi
-	RiKiTa

A 140 (13:25)	
X	KatSTeTe
-	TeTeKaTa
2	GaDiGeNa
-	DhaTreKeDhi
-	KiTaKaTa
0	GaDiGeNa
-	NaGeNaNa
3	GeNaNaGe
-	TiRiKiTa
-	DhaTreKeDhi

A 141 (13:29)	
X	KiTaKaTa
-	GaDiGeNa
2	NaGeNaNa
-	GeNaNaGe
-	TiRiKiTa
0	DhaTreKeDhi
-	KiTaKaTa
3	GaDiGeNa
-	NaGeNaNa
-	GeNaNaGe

A 142 (13:33)	
X	GeNaNaGe
-	TiRiKiTa
2	Dha
-	NaGeNaNa
-	GeNaNaGe
0	TiRiKiTa
-	Dha
3	NaGeNaNa
-	GeNaNaGe
-	TiRiKiTa

A 143 (13:37)	
X	KatSTeTeTeTe
-	KaTaGaDiGeNa
2	DhaTreKeDhiKiTa
-	KaTaGaDiGeNa
-	NaGeNaNaGeNe
0	NaGeTiRiKiTa
-	DhaTreKeDhiKiTa
3	KaTaGaDiGeNa
-	NaGeNaNaGeNa
-	NaGeTiRiKiTa

A 144 (13:40)	
X	DhaTreKeDhiKiTa
-	KaTaGaDiGeNa
2	NaGeNaNaGeNa
-	NaGeTiRiKiTa
-	Dha
0	NaGeNaNaGeNa
-	NaGeTiRiKiTa
3	Dha
-	NaGeNaNaGeNa
-	NaGeTiRiKiTa

A 145 (13:44)	
X	Dhin
-	S
2	Dhin
-	TeTe
-	Na
0	Thin
-	Na
3	NaNa
-	DheTe
-	NaNa

A 146 (13:48)	
X	Dhin
-	Na
2	Dhin
-	DheTe
-	Na
0	Thin
-	Na
3	Dhin
-	DheTe
-	Na

Gat:

A 147 (13:52)	
X	Dhin
-	Na
2	DhinSSKre
-	Dhin
-	Na
0	Thin
-	Na
3	Dhin
-	Dhin
-	Na

A 148 (13:55) <i>(spoken)</i>	
X	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
2	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
-	<i>DhirDhirKittak</i>
0	<i>TakitDha</i>
-	<i>TakitDha</i>
3	<i>TakitDha</i>
-	<i>DhaSKaTa</i>
-	<i>Dha</i>

A 149 (13:59)	
X	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
2	<i>DhaSKaTa</i>
-	<i>DhaSDhirDhir</i>
-	<i>KittakTakit</i>
0	<i>DhaDha</i>
-	<i>KaTaDha</i>
3	<i>DhirDhirKittak</i>
-	<i>TakitDha</i>
-	<i>DhaSKaTa</i>

A 150 (14:03)	
X	<i>Dhin</i>
-	Na
2	Thin
-	TeTe
-	Na
0	Thin
-	Na
3	ThinTir
-	KitDhet
-	Na

A 151 (14:07)	
X	DhirDhirKittak
-	TakitDha
2	DhirDhirKittak
-	TakitDha
-	DhirDhirKittak
0	TakitDha
-	TakitDha
3	TakitDha
-	DhaSKaTa
-	Dha

A 152 (14:10)	
X	DhirDhirKittak
-	TakitDha
2	DhaSKaTa
-	DhaSDhirDhir
-	KittakTakit
0	DhaDha
-	KaTaDha
3	DhirDhirKittak
-	TakitDha
-	DhaSKaTa

A 153 (14:14)	
X	Dhin
-	Na
2	Thin
-	Thin
-	Na
0	Thin
-	Na
3	Thun
-	TeTe
-	NaNa

A 154 (14:19)	
X	Thin
-	S
2	TeTe
-	TeTe
-	NaNa
0	TeTe
-	NaNa
3	ThinNa
-	NaThin
-	NaNa

A 155 (14:22)	
X	ThinThin
-	NaThin
2	ThinNa
-	ThinThin
-	NaThin
0	ThinNa
-	ThinThin
3	NaNa
-	ThinThin
-	NaNa

A 156 (14:26)	
X	Thin
-	TeTe
2	Na
-	TeTe
-	NaNa
0	TeTe
-	NaTe
3	ThiKe
-	KeKe
-	S

A 157 (14:29) (spoken)	
X	One
-	S
2	S
-	TeTe
-	Na
0	Na
-	TeTe
3	Na
-	TeNa
-	TeTe

A 158 (14:33)	
X	One
-	S
2	S
-	TeTe
-	Na
0	Thin
-	Na
3	Thin
-	Na
-	TeTe

A 159 (14:37)	
X	Dha
-	TeTe
2	Dha
-	DheTe
-	DhaTe
0	ThinNa
-	ThinThin
3	DhinSSKre
-	DhinTe
-	Na

A 160 (14:41)	
X	Dha
-	Ge
2	Dhin
-	DheTe
-	Na
0	Thin
-	NaTe
3	Dhin
-	DheTe
-	Na

A 161 (14:45)	
X	Dha
-	S
2	DhiNa
-	GeNa
-	SNa
0	DhaGe
-	Dhin
3	SDha
-	GeDhin
-	S

Layakri:

A 162 (14:49)	
X	<i>One</i>
-	
2	<hr/> <i>Two</i>
-	
-	
0	<hr/> <i>Three</i>
-	
3	<hr/> <i>Four</i>
-	
-	

A 163 (14:52)	
X	<i>One</i>
-	
2	<hr/> <i>Two</i>
-	
-	
0	<hr/> <i>Three</i>
-	
3	<hr/> <i>FourDhaTirkittaktirkit</i>
-	
-	

A 164 (14:56)	
X	<i>One</i>
-	
2	<hr/> <i>Two</i>
-	
-	
0	<hr/> <i>Three</i>
-	
3	<hr/> <i>DhaTirkittakNaTirkittak</i>
-	
-	

A 165 (15:00)	
X	One
-	S
2	SThi
-	SThi
-	STe
0	Na
-	Thin
3	SNa
-	S
-	S

A 166 (15:05)	
X	Dha
-	
2	S
-	
-	
0	DhaDha
-	Ti
3	S
-	
-	

A 167 (15:07)	
X	Thin
-	
2	S
-	
-	
0	DhaDha
-	Ti
3	S
-	
-	

A 168 (15:11)	
X	Dha
-	Dhin SGa
2	Dha
-	
-	Thin SKa
0	Tha
-	Thin SKa
3	Tha
-	
-	Dhin SGa

A 169 (15:15)	
X	DhaSDhinSGa
-	
2	DhaSThinSKa
-	
-	
0	ThaSThinSKa
-	
3	ThaSDhinSGa
-	
-	

A 170 (15:19)	
X	Dha
-	Thin
2	DhaGe
-	DhinNa
-	
0	Dha
-	Thin
3	ThaKa
-	DhinNa
-	DhaGe
-	ThinNa

A 171 (15:23)	
X	ThaGe
-	DhiNa
2	DhaGe
-	ThiNa
-	
0	ThaKa
-	DhiNa
3	DhaGa
-	ThiNa
-	ThaGa
-	DhiNa

A 172 (15:27)	
X	Dha
-	
2	Dha
-	
-	
0	Dha
-	Thin
3	Tha
-	
-	Dhin

A 173 (15:31)	
X	DhaDha
-	Dhin
2	ThaTha
-	Thin
0	ThaTha
-	Thin
3	ThaTha
-	Thin
-	Thin

A 174 (15:34)	
X	DhaGe NaDhin
-	
2	ThaTha
-	Thin
0	ThaTha
-	Thin
3	ThaTha
-	Thin
-	Thin

A 175 (15:38)	
X	DhaThi
-	DhaThiThi
2	ThaThi
-	ThaThiThi
0	ThaThi
-	ThaThiThi
3	DhaThi
-	DhaThiThi
-	DhaThiThi

A 176 (15:42)	
X	DhaThi
-	DhaThiThi
2	DhaThi
-	DhaThiThi
0	ThaThi
-	ThaThiThi
3	ThaThi
-	ThaThiThi
-	ThaThiThi

A 177 (15:45)	
X	DhaThi
-	DhaThiThi
2	DhaThi
-	DhaThiThi
-	DhaThiThi
0	ThaThi
-	ThaThiThi
3	ThaThi
-	ThaThiThi
-	ThaThiThi

A 178 (15:49)	
X	DhaGe
-	DhinNaDha
2	DhinNa
-	DhaGeDhin
-	DhaGeDhin
0	NaTha
-	KaDhinNa
3	TiDha
-	DhaThiThi
-	DhaThiThi

A 179 (15:53)	
X	ThaKe
-	ThinNaTha
2	ThinNa
-	ThinNa
-	ThaNaThi
-	ThaNaThi
0	NaTha
-	ThiNaDha
3	GeDha
-	GeDha
-	DhaDhinNa

A 180 (15:57)	
X	ThinThin
-	NaDhinNa
2	DhInNa
-	DhInNa
-	ThinThinNa
-	ThinThinNa
0	DhinNa
-	DhinNaDha
3	NaThin
-	NaThin
-	NaGeNa

A 181 (16:00)	
X	ThinThin
-	NaDhinNa
2	DhInNa
-	ThinThinNa
0	DhInNa
-	DhinNaDha
3	NaThin
-	ThinDhaGe

A 182 (16:04)	
X	DhinNa
-	ThaDhinDhin
2	NaDhin
-	NaThaDhin
0	DhinNa
-	DhinNaTha
3	DhinDhin
-	NaDhinNa

A 183 (16:08)	
X	ThaDhin
-	DhinNaDhin
2	NaTha
-	DhinDhinNa
0	DhinNa
-	ThaDhinDhin
3	NaDhin
-	NaThaDhin

A 184 (16:11)	
X	DhiNa
-	DhinDhinNa
2	DhiNa
-	DhinDhinNa
0	DhinNa
-	DhinNaDha
3	DhiNa
-	DhinDhinNa

A 185 (16:15)	
X	Dhin
-	TeTe
2	TeNa
-	ThinTe
-	ThuNa
0	ThaTe
-	TeTe
3	TeThin
-	SSDhirDhir
-	Kittaktakit

A 186 (16:19)	
X	Dhin
-	Dhe
2	DhiNa
-	GeNa
-	NaThin
0	NaTha
-	TheThe
3	TeNa
-	TheThe
-	TheThe

Chalan:

A 187 (16:22)	
X	DhaDiGeNa
-	DhaDiGeNa
2	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa
0	DhaDiGeNa
-	DhaDiGeNa
3	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa

A 188 (16:26)	
X	DhaDiGeNa
-	DhaDiGeNa
2	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa
0	DhaDiGeNa
-	DhaDiGeNa
3	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa

A 189 (16:27)	
X	DhaDiGeNa
-	DhaDiGeNa
2	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa
0	DhaDiGeNa
-	DhaDiGeNa
3	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa

A 190 (16:30)	
X	DhaDiGeNa
-	DhaDiGeNa
2	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa
0	DhaDiGeNa
-	DhaDiGeNa
3	DiNaDhaDi
-	GeNaDhaDi
-	GeNaDhiNa

A 191 (16:33)	
X	DhaDiGeNa
-	DhaDiGeNa
2	DiNaDha
-	SSDhaTir
-	Kittaktirkit
0	Thin
-	Kat
3	TeNa
-	SSDhaTir
-	Kittaktirkit

A 192 (16:37)	
X	Dhin
-	NaSTir
2	KittaktirDha
-	GeNa
-	Tirkitttakitir
0	Tha
-	ThaTirkittak
3	TirkitDha
-	SSDhaTir
-	Kittaktirkit

A 193 (16:41)	
X	Dhin
-	DhaTirkittak
2	TirkitDha
-	DhasDhaTir
-	Kittaktirkit
0	Thin
-	NaTirkittak
3	TirkitDha
-	DhaSDhaTir
-	Kittaktirkit

A 194 (16:45)	
X	Dhin
-	DhaTirkittak
2	TirkitDha
-	SDhaTir
-	Kittaktirkit
0	Thin
-	NaTirkittak
3	TirkitDha
-	SDhaTir
-	Kittaktirkit

A 195 (16:48)	
X	Dhin
-	DhirDhirKittak
2	TirkitDhaTir
-	KittakThinDhaTir
-	Kittaktirkit
0	DhaTirkittak
-	DhinDhaTirkit
3	TaktirDhaTirkit
-	TirkitDhinDhaTir
-	kittaktirkit

A 196 (16:51)	
X	Dha
-	ThinTirkittak
2	TirkitDhaTir
-	KittakThinDhaTir
-	Kittaktirkit
0	DhaTirkittak
-	DhaTirkittak
3	TirkitDhaTir
-	KittakThinDhaTir
-	Kittaktirkit

A 197 (16:56)	
X	DhaTirgidnag
-	DhinTirgidnag
2	DhaTirgidnag
-	DhinTirgidnag
-	DhaTirgidnag
0	DhinTirgidnag
-	DhaTirgidnag
3	DhinTirgidnag
-	DhaTirgidnag
-	DhinTirgidnag

A 198 (17:00)	
X	Dha
-	DhaTirkittak
2	TirkitDhaTir
-	KittakDhaTir
-	Kittaktirkit
0	DhinTirkittak
-	DhinTirkittak
3	TirkitDhaTir
-	KittakDhaTir
-	Kittaktirkit

A 199 (17:03)	
X	DhaTirgidnag
-	DhinTirgidnag
2	DhaTirgidnag
-	DhinTirgidnag
-	DhaTirgidnag
0	DhinTirgidnag
-	DhaTirgidnag
3	DhinTirgidnag
-	DhaTi
-	DhinSDhaTir

A 200 (17:07)	
X	GidnagDhinTir
-	GidnagDhaTi
2	Dhin
-	DhaTirgidnag
-	DhinTirgidnag
0	DhaTi
-	Dhin
3	DhaTirgidnag
-	DhinTirgidnag
-	DhaTi

A 201 (17:11)	
X	DhinDhaTir
-	GidnagDhinTir
2	GidnagDha
-	TiDhin
-	DhaTirgidnag
0	DhinTirgidnag
-	DhaTi
3	Dhin
-	DhaTirgidnag
-	DhinTirgidnag

A 202 (17:15)	
X	DhaTi
-	DhinDhaTir
2	GidnagDhinTir
-	GidnagDha
-	TiDhin
0	DhaTirgidnag
-	DhinTirkittak
3	DhaTi
-	Dhin
-	DhaTi

A 203 (17:18)	
X	Dhin
-	
2	
-	
-	
0	
-	
3	
-	
-	

End Solo

## Synopsis of Performance: Nagarajan Sundar

Composition	No. of Avartas
(Mridangam solo 0:14-3:00)	17
(Ghatam solo 3:00-6:10)	20
<i>Mora</i>	1
<i>Nadai/Theka</i>	13
<i>Rela</i>	1
<i>Nadai/Theka</i>	2
<i>Chakradar</i>	4
(Mridangam solo 9:33-11:58)	15
(Ghatam solo 11:59-15:08)	20
<i>Nadai/Theka</i>	4
<i>Chakradar</i>	3
<i>Koraippu (16:50-End)</i>	

Tala: *Adi Tala*:

1	2	3	4	5	6	7	8
X	2	3	4	X	0	X	0

Elapsed Time: 23:11

Mora:

Avarta 38 (6:11)	
X	DhaDhaDha
2	S
3	SSSS DhaSSDha
4	SSDhaS SDahSS
X	DhaSSS DhaSSDha
0	SSDhaS SDhaSS
X	DhaSSS DhaNaSDha
0	NaSDhaNa SDhaNaS

A 41 (6:19)	
X	Dha
2	S
3	S
4	S
X	S
0	S
X	SSSTirkit
0	Dha

A 42 (6:29)	
X	S
2	DhinSSDhin
3	SSSDhin
4	STeTeThin
X	STeTeThin
0	STeTeTeSTe
X	ThaSTeTeTeTeTha
0	TirkittakDha SDhaTirkittak

A 43 (6:39)	
X	DhaGeGeSGeGeDha
2	DhaGeGeSGeGeDha
3	DhaGeGeSGeGeDha
4	DhaGeGeSGeGeDha
X	DhaSSTeTeTeTa
0	DhaKiTaNaTaKa tirkitNaKaTirkittak
X	DhaSSTeTeTeTha
0	STeTeTeTeTeTha

A 44 (6:47)	
X	ThaTeTeTeTeTeTha
2	STirkittakThinNaTirkittak
3	DhaSSGeSSGeS
4	DhaSSDheTeTeDheTe
X	DhaSSDheTeTeDheTe
0	DhaSSDheTeTeDheTe
X	DhaSSDheTeTeDheTe
0	DhaSSDheTeTeDheTe

A 45 (6:57)	
X	DhaSSDheTeTeDheTe
2	DhaNaSDheTeTeDheTe
3	DhaNaSDheTeTeDheTe
4	DhaSSDheTeTeDheTe
X	DhaSSDheTeTeDheTe
0	DhaNaGeDhaTiDhaTirkit
X	DhaSSDheTeTeDheTe
0	DhaNaGeDhaTiDhaTirkit

A 46 (7:06)	
X	DhaSSDheTeTeDheTe
2	DhaNaGeDhaTiDhaTirkit
3	DhaNaGeDhaTiDhaTirkit
4	DhaNaGeDhiSDhiThi
X	DhaNaGeDhiSDhiDha
0	DhaNaGeDhiSDhiDha
X	DhaNaGeDhaSNaSNa
0	DhaTirkittakNa SNaKaTirkit

A 45 (7:16)	
X	DhaTiGeNaDhaTiGeNa DhaTiGeNaDha
2	SSTirkit ThinNaTirkit
3	DhaTiGeNaDhaTiGeNa DhaTiGeNaDha
4	SSTirkit ThinNaTirkit
X	DhaTiGeNaDhaTiGeNa DhaTiGeNaDhaTiGeNa
0	DhaNaTirkitNa NaTirkitDhaNa
X	TirkitNaNaTirkit DhaNaTirkitNa
0	NaTirkitDhaNaTir KitNaNaTirkit

A 46 (7:26)	
X	DhaSStirkit
2	DhaGeGeSGeGeDha
3	DhaGeGeSGeGeDha
4	SSNaNaTeTeTeTeTe
X	DhaGeGeSGeGeDha
0	SSNaNaTeTeNa
X	SNaSThin
0	SThinSNaNa

A 47 (7:36)	
X	SDhinSDha
2	SDhaSDhaNa
3	STakSTak
4	STakSDhaNa
X	STakSTak
0	STakSDhaNa
X	SSDhaSDhiNaSDha
0	SDhinSDhaNaSNaS

A 48 (7:45)	
X	SDhaSDhin
2	SDhaSDhaNa
3	SThiSTak
4	STakSDhaNa
X	SThaSThin
0	SDhaSDhaNa
X	SDhaSDhin
0	SDhaSNa

A 49 (7:55)	
X	KiTadhaTiDhaSKi
2	TadhaTiDhaSKiTa
3	DhaTiDhaSSKi
4	TadhaTiDhaSKiTa
X	DhaTiDhaSKiTaDha
0	TiDhaSSKiTa
X	DhaTiDhaSKiTaDha
0	TiDhaSKiTaDhaTi

A 50 (8:05)	
X	DhaGeGeSGeGeDha
2	DhaNaGeDheTeTeTe
3	NaSSTeTeTeTeTe
4	NaNaSTeTeTeTeTe
X	DhaNaGeDheTeTeTeTe
0	DhaNaGeDheTeTeTeTe
X	DhaNaGeDheTeTeTeTe
0	DhaTiGeNaDhaTiGeNa DhaTiGeNaDhaTiGeNa

A 51 (8:14)	
X	DhaTiGeNaDhaTiGeNa DhaTiGeNaDhaTiGeNa
2	DhaTiGeNaDhaTiGeNa DhaTiGeNaDhaTiGeNa
3	DhaTiGeNaDhaTiGeNa DhaTiGeNaDhaTiGeNa
4	DhaTiGeNaDhaTiGeNa DhaTiGeNaSSDhaS
X	DhiNaGeNaDhaTiGeNa DhiNaGeNaDhaTiGeNa
0	DhiNaGeNaDhaTiGeNa DhiNaGeNaDhaTiGeNa
X	DhiNaGeNaDhaTiGeNa DhiNaGeNaDhaTiGeNa
0	DhiNaGeNaDhaTiGeNa DhiNaGeNaDhaTiGeNa

*Rela:*

A 52 (8:24)	
X	DhiNaDhiNaTaKaDhiNa GeNaDhiNaDhaTiGeNa
2	DhiNaDhiNaTaKaDhiNa GeNaDhiNaDhaTiGeNa
3	DhiNaDhNaTaKaDhiNa GeNaDhiNaDhaTiGeNa
4	DhiNaDhiNaTaKaDhiNa GeNaDhiNaDhaTiGeNa
X	DhiNaDhiNaTaKaDhiNa GeNaDhiNaDhaTiGeNa
0	DhaNaTirkitDha NaTirkitNaKaTirkit
X	DhaNaTirkitDha NaTirkitNaKaTirkit
0	DhaNaTirkitDha NaTirkitNaKaTirkit

A 53 (8:33)	
X	DhaSSGeTeTeTeTe
2	DhaNaGeDheTeTeTeTe
3	NaNaTeTeThaSKiTa
4	NaNaTeTeDhaSTiS
X	DhaSSTha
0	NaNaTeTeDhaSTiS
X	DhaSNaNa
0	TeTeDhaSTiSDha

Chakradar:

A 54 (8:43)	
X	SSSSDhaDhaSDha
2	DhaSDhaS
3	ThaThaSDhaDhaSDhaDha
4	SDhaDhaSDha
X	SSSSDhaDhaSDha
0	ThaSDhaDhaSDhaThaS
X	DhaDhaSDha DhaThiTir
0	kitDhaThi DhaSS

A 55 (8:53)	
X	DhaSNaNaTeTe DhaTiDha
2	STeDhaDhaTeTe DhaTi
3	DhaTeTe DhaTirkittak
4	Dha DhaTirkittak
X	DhiTirkittak Dha
0	DhaTirkittak DhiTirkittak
X	DhaTirkittak DhaSThiSDhaNa
0	DhaNaDhaSTiS Dha

A 56 (9:03)	
X	NaNaNaNaTeTe DhaSTiSDhaS
2	SSSSNaNa TeTeDhaSTiS
3	Dha DhaTirkittak
4	Dha DhaTirkittak
X	DhiTirkittak Dha
0	DhaTirkittak DhiTirkittak
X	DhaTirkittak DhaSThiSDhaNa
0	DhaSTiSDha SSDhaNaTeTe

A 57 (9:12)	
X	DhaSTiSDha SSDhaNaTeTe
2	DhaSTiSDha SDhaTirkit
3	DhaSSDhaTirkit DhiTirkitDha
4	SDhaTirkit DhiTirkitDha
X	TirkitDhaThi TirkitDhaSTiS
0	DhaSDhaTirkit DhaSTiSDha
X	TirkitDhaSTiS DhaSTirkitDhaSTi
0	Dha DhaTirkitDha

A 58 (9:22)	
X	SDhaTirkit DhiTirkitDha
2	SDhaTirkit DhiTirkitDha
3	TirkitDhaThi TirkitDhaSTiS
4	DhaSDhaTirkit DhaSTiSDha
X	TirkitDhaSTiS DhaSDhaSTirkit
0	DhaS DhaTirkitDha
X	SDhaTirkit DhiTirkitDha
0	SDhaTirkitDhi TirkitDhaTirkit

A 59 (9:32)	
X	DhaDhaDha
2	S
3	S
4	S
X	S
0	S
X	S
0	S

Mridangam solo 9:33-11:58

Ghatam solo 11:59-15:08

A 97 (15:37)	
X	S
2	DhaTirkittak DhaTirkittak
3	DhaTirkittak DhaTirkittak
4	DhaTirkittak DhaTirkittak
X	DhaSDhaSDha TeTeTeDha
0	SDhaNaSTe TeTeTeDha
X	ThaTirkittak ThaTirkittak
0	ThaTirkittak ThaTirkittak

A 98 (15:47)	
X	DhaTirgidnag DhaTirgidnag
2	DhaTirgidnag DhaTirgidnag
3	DhaTirkittak DhinTirkittak
4	DhaTirkittak DhinTirkittak
X	DhaTirkittak DhaTirkittak
0	DhaTirkittak DhaTirkittak
X	DhaTirkittak DhaTirkittak
0	DhaTirkittak DhaTirkittak

A 99 (15:56)	
X	DhaTirkittak DhinTirkittak
2	DhaTirkittak DhinTirkittak
3	DhaTirkittak DhinTirkittak
4	DhaTirkittak DhinTirkittak
X	DhaTirkittak DhinTirkittak
0	DhaTirkittak DhinTirkittak
X	DhaSKraDhaTirkit taktirkitDhaSKra
0	DhaTirkittak DhaTirkittak

A 100 (16:06)	
X	DhaTirkittak DhinTirkittak
2	DhinTirkittak DhaTirkittak
3	DhaTirkittak DhinTirkittak
4	DhinTirkittak DhaTirkittak
X	DhaTirkittak DhinTirkittak
0	DhaSSKraDhaSSKra DhinTirkittak
X	DhinTirkittak DhaTirkittak
0	DhaTirkittak DhinTirkittak

*Chakradar:*

A 101 (16:16)	
X	Dha DhaSSSDhaNaDha
2	TeTeTeDhaTeTe Dha
3	DhaSSSDhaNaDha TeTeTeDhaTeTe
4	Dha DhaSSSDhaNaDha
X	TeTeTeDhaTeTe Dha
0	DhaDhinDhinDha
X	DhaSDhaDhaSDha SDhaSDhaSDha
0	DhaSDhaSDha SDhaSDhaDhaS

A 102 (16:25)	
X	DhaSDhaSDhaS DhaTirkittak
2	DhinTirkittak Dha
3	DhaTirkittak DhinTirkittak
4	Dha DhaTirkittak
X	DhinTirkittak Dha
0	DhaDhinDhinDha
X	DhaSDhaDhaSDha SDhaSDhaSDha
0	DhinSDhinSDhaS DhaTirkittak

A 103 (16:35)	
X	DhinSDhinSDhaS DhaTirkittak
2	DhinTirkittak Dha
3	DhaTirkittak DhinTirkittak
4	Dha DhaTirkittak
X	DhinTirkittak Dha
0	DhaDhinDhinDha
X	DhaSDhaDhaSDha SDhaSDhaSDha
0	DhaSDhaSDhaDha SDhaSDhaSDha

A 104 (16:48) <i>Begin koraippu</i>	
X	Dha
2	S
3	S
4	S
X	S
0	S
X	S
0	S

## Glossary of Terms

*Alap/Alapana* – An a-rhythmic exposition of a *raga* performed at the beginning of a concert selection.

*Akshara* – Component units of a Karnatik rhythmic cycle.

*Anga* – “Limb;” component divisions comprising the structure of a Karnatik rhythmic cycle.

*Avarta* – “Enclosure;” the duration of one rhythmic cycle.

*Baj* – “Style;” referring to the three particular styles of tabla performance practice.

*Bhakti* – Devotion; devotional love.

*Bol* – “To speak;” the mnemonic syllables associated with strokes of the tabla and other Indian percussion instruments.

*Bhagavatar* – A musician-teacher of high social distinction, most often Brahmin.

*Chakradar* – “Having circles;” a fixed compositional form of the tabla consisting of a body of thematic musical material ending with a *tihai*, which is performed three times verbatim and separated by equal gaps with the final note of the third iteration arriving on the downbeat.

*Chaupalli* – A distinction of musical composition employing four different *laya*.

*Chinna Melam* – “Small ensemble;” an ensemble of musicians associated primarily with the dance performances of the monastic courts.

*Devadasi* – “Servant of God;” the community of women dancers affiliated to the ritual practices of Hindu temples.

*Dupalli* – A distinction of musical composition employing two different *laya*.

*Gat* – “Composition;” a fixed compositional form of the tabla.

*Ghatam* – A tuned clay pot idiophone used as an accompaniment instrument in Karnatik music.

*Harikatha* – Along with *kathakalaksepam*, one of the genres of Indian musical theatre that was popular within the court at Tanjore.

*Javali* – A love song derived from dance music.

*Kaida* – A theme-and-variation composition of the Tabla, comprised of an original theme (*kaida*) and a series of thematic permutations (*paltas*).

*Kanjira* – A frame-drum idiophone made of a wooden frame with monitor lizard skin.

*Katcheri* – “Court;” a Karnatik musical concert.

*Kirtana/Kriti* – The central genres of the Karnatik music tradition, which draw their content from devotional poetry.

*Konakkol* – The practice of orally reciting Karnatik rhythmic syllables.

*Korvai* – A rhythmic musical form specific to Karnatik music, often concluding with a mora.

*Laya* – The number of divisions that can be applied to one matra.

*Matha* (pl. *matham*) – The monastic courts of South India; often associated with an adjoining temple complex such as at Tanjore.

*Matra* – A beat or unit comprising a rhythmic cycle.

*Mela* – Lit. “Ensemble;” used to identify the various performing groups that

*Melakarta* – The 72 parent scales from which the many ragas of Karnatik music are derived.

*Mora* – A cadential musical form specific to Karnatik music that is comprised of a phrase that is repeated verbatim three times separated by equal gaps with the final note of the last iteration arriving on the downbeat.

*Morsing* – A jaw harp used as an accompaniment instrument in Karnatik music.

*Mridangam* – A barrel-shaped membranophone specific to Karnatik music.

*Nadasvaram* – A double-reed aerophone often associated with Hindu ritual music.

*Nattuvars* – The instructors and accompanists of the devadasis.

*Padam* – A love song address to a deity; a dance music genre in bharatanatyam.

*Pakhawaj* – A barrel-shaped membranophone specific to Hindustani music that is the primary rhythmic accompaniment for *dhrupad* music.

*Parhan* – A dance form originally accompanied by the pakhawaj employing a diversity of rhythmic variation.

*Periya Melam* – “Great ensemble;” an ensemble tied to the musical practices of Hindu religious ritual.

*Raga* – Melodic mode.

*Rela* – A theme-and-variation composition of the tabla characterized by the repetition of rapidly occurring non-resonant strokes.

*Sabha* – An independently owned music association.

*Sadhana* – Hindu ritual practices.

*Sam* – The initial beat of a rhythmic cycle.

*Solkattu* – Rhythmic syllables of Karnatik music.

*Taal/Tala* – Rhythmic cycle.

*Tabla* – “Drum;” a set of membranophones specific to Hindustani music that is composed of a higher (*tabla*) and lower (*bayan*) drum.

*Tabliya* – Propagators of the tabla.

*Talam* – A set of cymbals used to demarcate subdivisions of a rhythmic cycle during a performance.

*Tala Vadya Katcheri* – “Rhythmic music concert;” a performance practice specific to Karnatik music featuring a diversity of percussion instruments.

*Tavil* – A barrel-shaped membranophone specific to Karnatik music. Commonly accompanies the nadasvaram.

*Theka* – A recurring pattern of drum bols that outlines a particular rhythmic cycle.

*Tihai* – A cadential musical pattern that is comprised of a phrase that is repeated verbatim three times separated by equal gaps with the final note of the last iteration arriving on the downbeat.

*Tipalli* – A distinction of musical composition employing three different laya.

*Varnam* – A “light classical” musical form in Karnatik music.

*Vibhag* – The subdivisions of a rhythmic cycle, differentiated by periods of greater and lesser emphasis (*tali* and *khali* respectively).

*Yati* – A concept of rhythmic design specific to Karnatik music that is based on a series of geometric shapes.

## **List of Supplemental Files**

1. NagarajanSundarSolo.m4v
2. RajeshDhawaleSolo.m4v

## Bibliography

- Bakhle, Janaki. *Two Men and Music: Nationalism in the Making of an Indian Classical Tradition*. New York: Oxford University Press, 2005.
- Booth, Gregory. *The Oral Tradition in Trasnition: Implications for Music Education from a Study of North Indian Tabla Transmission*. PhD Diss., Kent State University, 1986.
- Day, C. R. *The Music and Musical Instruments of Southern India and the Deccan*. Delhi: B.R. Publishing Corporation, 1891.
- Dehejia, Vidya. *Art of the Imperial Cholas*. New York: Columbia University Press, 1990.
- Dirks, Nicholas, ed. *Colonialism and Culture*. Ann Arbor: University of Michigan Press, 1992.
- Gottlieb, Robert. *The Major Traditions of North Indian Tabla Drumming: A Survey Presentation Based on Performances by India's Leading Artists*. Munich: Musikverlag Emil Katzwichler, 1977.
- \_\_\_\_\_. *Solo Tabla Drumming of North India: Its Repertoire, Styles, and Performance Practices*. Delhi: Motilal Banarsidass Publishers, 1993.
- Harp, Matthew Allen. "Tales Tunes Tell: Deepening the Dialogue between 'Classical' and 'Non-Classical' in the Music of India." *Yearbook for Traditional Music*, Vol. 30 (1998): 22-52.
- Hindu Music and the Gayan Samaj*. Bombay: Published in Aid of the Funds of the Madras Jubilee Gayan Samaj, 1887.
- Iyer, P. S. *Articles on Carnatic Music*. Tirupapuliur: Kamala Press, 1937.
- Jones, Sir William. *On the Musical Modes of the Hindus*. London, 1789.
- Journal of the Music Academy*. Madras, 1929-2002.
- Keay, John. *India: A History*. New York: Grove Press, 2000.
- Kippen, James. *The Tabla of Lucknow: A Cultural Analysis of a Musical Tradition*. Delhi: Manohar Publishers, 1988.
- Lybarger, Lowell. *The Tabla Solo Repertoire of Pakistani Panjab: an Ethnomusicological Perspective*. PhD Diss., University of Toronto, 2003.
- Marglin, Frederique Apffel. *Wives of the God-King: The Rituals of the Devadasis of Puri*. Delhi: Oxford University Press, 1985.

- Mistry, Aban. *Pakhawaj and Tabla: History, Schools, and Traditions*. Mumbai: New Rajkamal Printing Press, 1999.
- Neuman, Daniel. *The Life of Music in North India*. Chicago: University of Chicago Press, 1990.
- Neuman, Dard. *A House of Music: The Hindustani Musician and the Crafting of Traditions*. PhD Diss., Columbia University, 2004.
- Sankaran, Trichy. *The Rhythmic Principles and Practice of South Indian Drumming*. Toronto: Lalith Press, 1994.
- Seetha, S. *Tanjore as a Seat of Music During the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> Centuries*. Madras, 1981.
- Stein, Burton. *South Indian Temples*. New Delhi: Vikas Publishing House, 1978.
- Subramanian, Laksmhi. *From the Tanjore Court to the Madras Music Academy: A Social History of Music in South India*. New Delhi: Oxford University Press, 2006.
- \_\_\_\_\_. *New Mansions for Music: Performance, Pedagogy and Criticism*. New Delhi: Social Science Press, 2008.
- \_\_\_\_\_. "The Reinvention of a Tradition: Nationalism, Carnatic Music and the Madras Music Academy, 1900-1947." *Indian Economic Social History Review*, 36, 2 (1999): 131-163.
- The Oxford Dictionary of Music Online. "Ensemble." Accessed May 15, 2011.
- Wade, Bonnie. *Music in India: The Classical Traditions*. Englewood Cliffs, NJ: Prentice Hall, 1979.
- Weidman, Amanda. *Singing the Classical, Voicing the Modern*. Durham, NC: Duke University Press, 2006.
- Wolf, Richard K., ed. *Theorizing the Local: Music, Practice, and Experience in South Asia and Beyond*. New York: Oxford University Press, 2009.
- Viswanathan T and Matthew Harp Allen. *Music in South India: The Karnatik Concert Tradition and Beyond*. New York: Oxford University Press, 2004.